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BALTIMORE, JULY 17, 1913.

CHARLES N. FOWLER ON PRO- POSED CURRENCY LEGIS- LATION.

Fifteen years ago the MANUFACTURERS RECORD published a striking article by Stuyvesant Fish, then vice-president of the Park National Bank of New York and president of the Illinois Central Railroad, one of the foremost financiers and railroad men in New York, in which he took the ground that the banking business of this country was nothing more than pawnbroking, and that in its broad sense we had no banking system. He pointed to the great success of the Scottish and Canadian banking systems as illustrations of the value of scientific banking to all the varied interests of the country. The value of such a system to the farming interests was pointed out, and emphasis was laid on the great injury to the country of the system under which we have been operating since the introduction during the war of this National banking system, with its note issue based on Government bonds.

The points so strongly emphasized by Mr. Fish have been brought more and more forcibly to the attention of the country by the conditions which have prevailed in recent years, for our present system, or lack of system, has brought about too great a concentration of the banking power of the country in New York to the disadvantage of the country. That the country needs a better banking system is universally accepted. Out of this cry for improvement has come an introduction of a currency bill in the present Congress which, it seems to the MANUFACTURERS RECORD, is fraught with greater dan-

gers than the evils which we now suffer. We believe it will be better to endure the present condition than to see the country experiment on so gigantic a scheme with fiat money and with a concentration of the entire banking interests of the country under the control of seven political appointees. The experience of the country with political appointees is not such as to encourage the nation in feeling that it would be wise to still further enlarge political power and centralize all of the national activities in Washington. Financial centralization in New York and national centralization in Washington are both evils to be avoided.

The view held by the MANUFACTURERS RECORD is that the proposed currency bill is unscientific, not based on sound banking, and that the control of the banking interests of the country by seven political appointees, whether they be Democrats or Republicans, would ultimately work disaster to the whole country. In this issue Hon. Charles N. Fowler, for eight years chairman of the banking committee of the House of Representatives, of which he was a member for 16 years, and author of a recent striking work, "Seventeen Talks on the Banking Question," discusses this proposed currency bill in a way that seems to leave no possible ground for any argument in favor of it. Mr. Fowler's illuminating presentation of the situation and of its great dangers as he sees them demands the thoughtful study of the bill by every man in the country, for a wise banking system is as essential to the farmer as to the merchant, as essential to the day laborer as to the capitalist, for disaster and industrial depression affect the farmer and the day laborer as much as they do the manufacturer and the capitalist. The banking question cannot be set aside as one of interest only to the banking fraternity; it cannot be regarded as affecting only the merchant and manufacturer. Every interest is equally vitally interested.

In his review of the situation Mr. Fowler points out the soundness of banking operations in Virginia and Louisiana and several other States prior to the war, and, bringing the matter down to date, claims that Canada has the best banking system in the world, which is very much in line with the view taken 15 years ago by Stuyvesant Fish in his commendation of Scottish and Canadian banking systems.

While Mr. Fowler's presentation of the dangers of this proposed bill seems to present unanswerable arguments against it, the MANUFACTURERS RECORD will be glad to have from its advocates a full and frank statement of their views in favor of it. The country needs to learn the truth, and it can be learned only through the broadest and frankest discussion of a matter which is of vital concern to all people.

So far we have not yet seen any strong presentation of the reasons for such a currency bill as that which has been proposed. The necessity of a currency bill has been advocated and en-

thusiastic commendation has been made of President Wilson's desire to give to the country an improved banking system, and yet we have not seen any argument that meets the points presented so clearly by Mr. Fowler. If any advocate of the measure can answer the presentation which Mr. Fowler has made, the MANUFACTURERS RECORD invites such a contribution.

THE SENATE'S OPPORTUNITY IN TARIFF-INCOME LEGISLA- TION.

Referring to the first opportunity for the United States Senate as a whole to consider the tariff-income tax law and to the expectation that two Senators will each consume a week in discussion, the Lynchburg (Va.) News says:

These two men alone will thus succeed in adding a fortnight to a period of industrial suspense, every hour of which means an important degree of suspension in the business activities of the country. How lamentable it all seems, how unnecessary and ill-judged and futile, as well as lamentable!

In the same connection, and as a preliminary of the change in the rules of the Senate tending to limit debate, the Lynchburg paper says:

Prudent expedition in disposing of legislation is not inconsistent with intelligent consideration and discussion of its merits. And prudent expedition is especially required when a change in principle of taxation is proposed and the business interests of the country are awaiting its enactment so as to begin the work of adjusting their policies and methods to the new conditions. Yet under the well-nigh unlimited scope for debate that is permitted in the upper branch of Congress we are about to witness a gross abuse of the privilege that will accomplish nothing tangible, while pregnant with more or less harmless consequences.

The history of the pending tariff-income tax bill emphasizes the conviction of thoughtful persons, not concerned about the fortunes of any political party, that the well-nigh unlimited scope for debate in the Senate should be insisted upon as long as it remains possible for the House of Representatives to be subject to rules that permitted the Senate to receive a bill that was manifestly unconstitutional in one of its main provisions, incapable of enforcement except at a cost to the Government at least equal to the revenue returns in some cases and in others at a cost to taxpayers greater than the amount of the tax to which they are made liable, even if, in some cases, it was physically possible to enforce the provisions, and speeded through the House by means of rules—the lash of the party caucus—that rendered futile practically every effort to eliminate most patent absurdities from the bill.

As it reached the Senate the tariff-income tax bill reeked with unconstitutionality, impracticability, contradiction and confusion, and was one of the most striking illustrations of the ease with which the rules of the House of Representatives allow to pass beyond its control as legislation the result of reckless incompetency and politics of a petty order.

It is a Godsend to the country that

the rules of the Senate still permit well-nigh unlimited scope for debate. Time will thus be gained for overcoming the crudities and the menaces still in the bill, or to bring clearly before the country the immediate responsibility for the harassings and injustices placed upon thousands of individuals and business interests by the tariff-income tax bill, the most prolific source of litigation that Congress has devised in half a century.

MANUFACTURERS AND THEIR RELATION TO AGRICUL- TURE.

Manufacturers are sometimes prone, as pointed out in a recent editorial in the MANUFACTURERS RECORD, to forget the intimate relationship which exists between agricultural prosperity and industrial development. The man who is making machinery or producing iron or steel is at times apt to forget that the greatest single manufacturing industry in the world next to iron and steel—the textile business—is wholly dependent upon agriculture for its raw material.

One needs hardly to be reminded of the many hundreds of millions of dollars invested in textile machinery in this and foreign lands based on the development of the cotton industry of the South. And yet machinery makers are sometimes inclined to overlook the importance of the efforts that are constantly being made by railroads and States and individual organizations to better the conditions under which cotton is raised.

The vast flour-milling business of the country, with its many millions of capital invested in machinery, is, of course, wholly dependent upon the continued progress of the wheat industry of the land. And yet manufacturers, even some of those who sell direct to the flour mills, are inclined to forget the importance of the things that make for the better cultivation of wheat.

The growth of the trucking industry in various parts of the country adds greatly to railroad traffic, and thus to the demand for railroad equipment, as well as for a varied line of agricultural implements and power machinery. We can no longer consider any line of business without taking into account these various angles from which it should be viewed. The production of a 15,000,000-bale cotton crop means not merely \$900,000,000 or more to the farmers who produce it, and half a billion dollars or more income from Europe to pay for the cotton bought from the South, but it means continued activity of all the hundreds of cotton mills throughout the country and the still greater number throughout Europe. Cotton production, therefore, is especially important to every business man in the country, whether he be a banker, manufacturer, merchant, a wheat grower in the Northwest, or a day laborer in any part of the land, for upon the cotton crop depends a large proportion of the prosperity of the country.

Without an adequate supply of wheat the cost of flour becomes unduly high and the consumer suffers therefrom. Without large crops of trucking and fruits shipped from one part of the country to another there would be a lessening of railroad traffic and a lessening of the comforts and the fruit supply of the nation.

The time has passed when manufacturers can think of their own particular line of industry as the only thing in which they are especially interested. They are necessarily, although they may not always realize it, vitally interested in everything that advances the betterment of agricultural conditions, that opens up new land to cultivation, that drains the overflowed wet lands or swamps and makes them available for man's use, or that takes the cut-over pine lands of the Northwest and of the South and makes them available for cultivation. All of these things are a part of the very life of the business interests of the country.

It is just as important to the machinery builder and the steel-rail maker to encourage in every possible way the broadest advancement of the agricultural interests of the country, the settlement of new lands and the increase in the production of fruit supplies as it is to study the questions which relate to the available iron-ore supply of the country, to the market for steel rails, the cost of pig-iron or the other elements which enter specifically into their individual activities. No man lives unto himself, and no business can possibly live unto itself in these days. There is no longer any individual existence to any industrial enterprise. It is but one part of the great machinery of the world's activities, and the intelligent, thinking man managing an industrial enterprise, large or small, must recognize that his concern is only one part of this mighty machinery, the successful movement of which depends upon every other part being well constructed and kept in working order. For these reasons the MANUFACTURERS RECORD gives much attention to the development of the agricultural interests of the South, to making known in its reading columns, as well as in its advertising pages, the soil resources of this section and the opportunities which the South offers to settlement and colonization operators.

THE MYSTERY OF THE AMERICAN COMMISSION ON AGRICULTURAL CO-OPERATION.

The more the "special cable" feature of the adventures in Europe of the American Commission on Agricultural Co-operation, assembled by the Southern Commercial Congress, is considered the more profound becomes the conviction that the project is worthy of its origin, although its serious members may not thoroughly comprehend the situation. The MANUFACTURERS RECORD in its issue of July 3 called attention to the remarkable feats in cabling and their circulation in official envelopes of the Government. Another bit of "news" was published in this country on July 9, introduced as follows:

Coblentz, Germany, July 8.—The American Commission of Agricultural Co-operation visited this city today and saw the monument and house of Raiffeisen, founder of the German co-operative banking system that bears his name. It was a notable occasion, and Mr. David Lubin, founder of the International Institute of Agriculture at Rome, Italy, who is accompanying the Commission on its investigation of agricultural co-operation and co-operative banking in 14 European countries, delivered an address at the House of Raiffeisen.

Then follow extracts from the speech

of Mr. Lubin. But either a miracle has occurred, or a great big joke has been perpetrated at the expense of the comparatively few persons who take seriously the American Commission on Agricultural Co-operation, or the *Congressional Record* has made a great big journalistic scoop upon the press of the country. For, in spite of the current story with a Coblentz date line of the visit of the Commission to the House of Raiffeisen on July 8, the *Congressional Record* of July 2 published in full the address of David Lubin and described it as having been "delivered by Mr. David Lubin of Sacramento, Cal., at the monument and house of Frederick William Raiffeisen, near Coblentz, Germany, on June 12, 1913. The occasion of the address was a visit to the birthplace of Raiffeisen by the American Agricultural Commission that sailed from New York on the 26th of last March."

Moreover, there was mailed from Washington as "official business" at noon on June 12, the date of the Commission's visit to Coblentz, a "special cable" beginning:

Milan, Italy, June 12.—Members of the American Commission on Agricultural Co-operation were shown through the largest silk warehouse in Northern Italy today.

The mystery of the miracle deepens as one considers other facts. Before it sailed from New York on April 26 the Commission appointed one of its members as general secretary, to "have the superintendence of the final compilation of its report, as well as aiding in the preparation of the special report of the Federal Commission to Congress." Under date of June 22 this secretary wrote from Berlin, Germany, that "the Commission has not been in any wise hampered or delayed at any point in gathering the fullest information, in the most minor details, covering the investigation it desired to make." The official schedule for the Commission arranged for it to leave Milan, Italy, on May 20, and yet the "special cable" mailed from Washington under the auspices of the Federal Commission had members of the Commission at Milan as late as June 12, with Hungary and Austria and Germany still before it, according to the schedule. Again, the schedule arranged for the Commission to leave Germany on June 28, and to remain in France from June 29 to July 7 and to arrive at London on July 8.

If the Commission was on July 8 still listening at Coblentz to David Lubin's address of June 12, when members of the Commission were still in Milan, Italy, and if it arrived in London one day before it was expected, it must have arrived in London one day before it left Coblentz, and, consequently, must have escaped the delights of nine days' stay in Paris, in spite of the whetting of the appetites of the members of the Commission for further study of agricultural co-operation and banking by those selected complexions of 20 Hungarian peasant girls, huge mugs of Hungarian beer and the turkey trot, with which, according to one of the "special cables" mailed from Washington as "Official Business," they were regaled on June 27 at Totmeyer, Hungary.

The theory as to a miracle is strengthened by the fact that although the Coblentz story had the Commission in that German city participating in the ceremony of July 8, another bit of "news" dated London, July 9, and published in this country on the afternoon of that day, which was Wednes-

day, had the Commission in London, about 400 miles distant from Coblentz, with Dover Strait lying between, "one day before it was expected," and stated that the Commission "will be taken to the country on Wednesday."

Nevertheless, the miracle theory does not fully explain how the Commission could have heard David Lubin at Coblentz on July 8 when an official publication of the Government stated on July 2 that the Commission heard Lubin on June 12, nearly a month earlier.

The general secretary of the Commission is one of the Federal commissioners for the expense of which \$25,000 were appropriated by the last Congress. It is hoped that his report may go into detail as to the "special cables" mailed from Washington as official business and may explain the remarkable conflict of dates. Otherwise, it is doubtful whether the report of the Commission will be worth 25 cents.

A DUTY BUSINESS MEN OWE THEMSELVES AND THE COUNTRY.

The dawning light is indicated by the fact that the courts and legislators are being blamed less than the makers of judges and legislators. Thus the National Association of Credit Men last week resolved that men of business were to blame for the Missouri muddle because they allow "rangers and incompetents with imagined grievances to deal out through the press and from the platform false pretenses without attempting to counteract their teachings with sound doctrine and then are surprised that after years of false teaching our legislators, eager to pander to the people, enact laws regulating business to the extent of suppression and running counter to laws immutable as gravitation."—*New York Times*.

The Credit Men's Association has stated the case fairly. The business men of this country are themselves to blame for the present condition of affairs in National and State legislation. Tacitly, if not actively, they have permitted the wild political ranter and demagogue and the muck-raker in the press and out of the press (for there are more muck-rakers outside of the press than in it) to carry on a campaign during the last 10 or 12 years which could have no other outcome than that which we now see. The public has been made to believe that the great industrial interests of the country are founded on fraud, that business is something to be destroyed rather than upheld, that all the honesty in the country is centered in the agitator and the muck-raker and the "dear people." The man who robs a street railroad of a carfare because he can escape the eyes of the conductor, the man who robs the steam road either by collusion with the conductor or by misleading the conductor, the farmer who packs bad fruit in the center of the barrel or the case and the good fruit on top, the employe who robs his employer by swindling him out of the time for which he is paid, are all just as guilty of wrong as the offender on a larger scale in the business world. If the agitators and ranters of the day, instead of seeking to array class against class and to make the country believe a large proportion of its business men are either without honor or without soul, would undertake to teach that the employe, boy or girl, man or woman, who loafs on his or her job is a thief, robbing the employer of that for which he has paid, or would undertake to teach the farmer that any man who seeks to misrepresent the character of his goods by putting only the best fruit on the top and the bad inside, would, if he got his just deserts, be accounted as guilty as the man who

robs a bank or a railroad by official misdoings, possibly there might be created in the land a broader spirit of charity and a recognition of the fact that none are quite as good as they ought to be, and that until a man has perfected his own character he must be careful about the stones that he throws at his neighbor. The business men of the country must seriously take hold of this situation. They must meet denunciation by open, fair and honest statements, presenting their side of the case. They must meet the ranter with facts which will eventually convince the public.

Take a specific case. For years the cotton manufacturers of the South have permitted themselves to be vilified in every imaginable way. They have been held up to the country as heartless child slave drivers, seeking to coin money out of the life blood of tender infants. From one end of the land to the other they have been thoroughly misrepresented. This great industry, which has been of such splendid value to the people of the South needing employment, has been made to appear to the nation as a curse to the country. The cotton-mill people themselves are largely to blame. They have gone ahead quietly but vigorously for the last quarter of a century improving the conditions of mill labor, building better homes for their employes, establishing schools and building churches, but have given no serious attention to a refutation of these falsehoods. Instead of sitting down quietly and permitting this misrepresentation to go broadcast and unanswered, they should from the very beginning have aggressively presented to the country the truth. They could have done it in a thousand ways. They could have presented through the advertising columns of the leading publications of the land (and it is through the advertising columns that great questions of this kind will have to be discussed) the actual facts. They could have shown what they are doing in the bettering of mill conditions. They could have presented some illuminating facts about the improvement in the people who have gone from the mountains and the poorer lands of the Piedmont regions into the cotton mills and been greatly benefited thereby. All of this could have been done intelligently, openly and in a way to command the respect of the country. It might be said that so broad an advertising campaign as this would be costly. It is quite true it would have cost many thousands of dollars, but it would have been cheaper merely from the material point of view, and many times cheaper in saving themselves from the opprobrium which has been cast upon them.

The great questions of the day in politics and in business must sooner or later be threshed out, not through press agents or publicity bureaus as they are generally conducted, but through straight, open, honest advertising through the displayed advertising pages of the newspapers of the country. Here is a field for work on the part of the business interests of the country which demands their attention. The longer they delay moving toward a proper presentation of the facts about business and about the honesty and strength of the business interests of the land as against the denunciation of the agitators and the ranters wherever they may be found, the greater will be the cost in the end. Even today the railroads of the country ought to be stating the reasons for their request for higher freight rates

through the advertising pages of the leading publications of the land. Too expensive, do they say? Is it more expensive than failure might be through the country's failure to appreciate the needs of the railroads?

AN ACID TEST FOR CONGRESS.

The Congress of the United States should not be unwilling to lay bare the act of every member of that Congress. The country wants light, and ought to have the light.

These high-sounding words of Representative Kahn of California ought to inspire the Congress to undertake a probe that might result in benefit to the country, a probe of the Congress itself for the purpose of revealing how many times within the past few years that body has undertaken to enact legislation in violation of its own rules and of the Constitution of the United States.

A beginning might well be made with the circumstances of the final action of the House of Representatives upon the newspaper publicity rider in the post-office appropriation act of August 24, 1912. The objections of the MANUFACTURERS RECORD, as of every other reputable newspaper, are not to the provisions of the newspaper publicity law, save in so far as they constitute an unwarranted control by the Federal Government over legitimate individual business, but to the dangerous methods by which the law was placed upon the statute books.

The potentialities for evil in that rider have become greater since the United States Supreme Court has discovered that the words "any such publication shall be denied the privileges of the mail" really mean "not an exclusion from the mails generally, but only from the right to participate in and enjoy the privileges accorded by the second-class classification," and that the rider is constitutional.

It is regretted that the Supreme Court was not called upon to review the several stages of action on August 22, 23 and 24, 1912, leading to the post-office appropriation bill's receiving the approval of the President at a late hour. There is much circumstantial evidence leading to a belief that the Presidential approval was given in spite of the absence from the House of Representatives on August 24 of the quorum of members required by the Constitution to give legality to the acts of the House. The members of the Congress who were parties to the transaction ought to be anxious to have such an important matter as that made clear, and, if their probe of themselves shall demonstrate that the circumstantial evidence is borne out by the facts, to take such steps as will prevent in all time a repetition of the dangerous experiment.

If one Congress can violate the Constitution in enacting legislation of one kind without let or hindrance, it will be just so much easier for another Congress to violate the Constitution in other legislations. The precedent, once set and undisputed, opens the way for the servants of the people to become the people's masters.

It is a fact that on the night of August 23, the day before the postoffice appropriation bill went to the President for approval, the statement was made on the floor of the House of Representatives, and uncontradicted, that there was no quorum of the House in Washington, and the belief was expressed that there was not a quorum that could be obtained for a roll-call for another week. The demand was

made, too, that the attention of the country should be called "to this evil of absenteeism," and that "the men who do not stay here" should be pointed out. Then the last division of that session of Congress was taken, and showed that there were but 164 members present—not a quorum. On page 12,820 of the *Congressional Record* of the Sixty-second Congress, second session, are the names of the 164 members who were present and the names of the 227 other members. Of the 164 members who were present, 130 are members of the present Congress. Of the 227 members not present, 143 are members of the present Congress. A good majority of the present Congress were, therefore, members of Congress at the time of the episode in question. Those who were not present when such an important legislation was under way ought to be willing to explain to the country why they were not present. The 130 who were present ought to demand that every act of theirs in connection with the postoffice appropriation bill and its newspaper publicity rider be laid bare. If they are in doubt as to the line of questions to be asked, they might consider the following:

Was or was not a quorum of the House of Representatives in the House at any time on August 24, 1912?

Can either house of Congress adopt a rule or custom whereby evasion may be made of the provision of the Constitution that a majority of each house "shall constitute a quorum to do business?"

Does the fact that no one raises the point of no quorum create a quorum in the absence of a majority of the members and in the face of the constitutional provision?

Is there a rule of the House that a report of a conference committee of the House and Senate must be read in each house before it may be acted upon?

Was the report of the committee of conference on the postoffice appropriation bill ever read in the House of Representatives?

Did the conferees on that bill incorporate into the agreement matters not in disagreement between the two houses or matters that had not been discussed on the floor of either house?

Through which one of the six conferees was such incorporation suggested, if it was suggested?

Did the House conferees in their statement, read in lieu of the conference report and in explanation of the action of the conferees, refer to an amendment made in the conference to the newspaper publicity rider?

These are questions which will not down, whether or not the Congress chooses to lay bare the act of every member. They will be asked again and again, whenever the occasion presents itself, as long as they are unanswered. As the Congress heeds them or pays no attention to them, so it will measure its own competency to legislate safely and wisely for the country and to investigate anything bearing upon Congressional action.

"The country wants light, and ought to have the light"—on the Congress itself.

CROPS VS. POLITICIANS.

Magnificent crop prospects throughout the larger part of the South will materially help to overcome the load which the politicians are trying to tie around that section's business life. But what marvelous prosperity this section would enjoy if no millstones were being tied around its neck!

A SUGGESTION ABOUT PELLAGRA.

Two Italians, professors of the Institute of Hygiene in Rome, have announced that pellagra, a mysterious and deadly disease quite prevalent in parts of Italy, and which for long has been attributed to the consumption of bad corn, is really caused by infected water, and that they have found that in the districts of Italy where the disease is most prevalent the water is infected. William E. Hughes of Charleston, S. C., president of the Hughes Specialty Well Drilling Co., referring to this announcement by the Roman doctors, says:

Of course, this may not be conclusive any more than the old-time and somewhat abandoned idea that it was caused by corn. In any event it is worth making note of.

If bad water is causing pellagra, it is within the means of our people to wipe out this plague by the drilling of wells and substituting pure artesian water for present water supply from impure sources.

James R. Randall not only wrote verse, but also interested himself in many of the material problems of the South. Readers of the MANUFACTURERS RECORD will recall his contention that malaria was a misnomer, and should be really malacqua, and his further argument that with the substitution of pure water for infected water malaria would disappear. Mr. Randall's argument was substantiated by facts following the driving of artesian wells in different parts of the South and abandonment of surface well water for drinking purposes. It is quite probable, therefore, from a layman's standpoint, that the discovery by the Italian doctors may be a valuable one, and may lead to the abandonment of other theories by so-called experts about the origins of other human ills.

TENDING TO LOW WAGES.

A recent English publication dealing with road building and management in the county in which Nottingham is located states that the laborers' wages are about 18 shillings a week, or \$4.50, while the foremen's range from 21 to 25 shillings, or about \$5.25 to \$6 per week. The chief county foremen receive 2 pounds 10 shillings—about \$12.50. The laborers work from 6.30 A. M. to 5.30 P. M., with an hour in the middle of the day for lunch and a half-hour for breakfast between 8 and 8.30. In winter the hours of work are practically from daylight until dark, that is, between 7.30 A. M. and 5 P. M. It would be rather difficult in this country at the present time to introduce such a rate of wages, and yet that is what our national legislation is indirectly tending to bring about, although its promoters make a specialty of attempts at coddling particular groups of labor.

BEWARE OF THE COTTON BEAR!

The world's cotton demand has been growing rather more rapidly than its production. There is need for a big crop this year, but with present indications of a large yield, added to the perplexities of tariff and currency bills which retard business activities, there is some danger that cotton bears may try to stampede cotton sellers this fall and cause a too rapid rush of cotton to market.

FOR PROFIT IN BUSINESS.

The Cordele Sash, Door & Lumber Co. of Cordele, Ga., in writing to the MANUFACTURERS RECORD, and referring

to the fact that they are subscribers, said:

We would be subscribers even were we not in a business to profit by it, because we think every business concern in the South should encourage its circulation.

We would like to see every business concern in the South follow the example of this company.

NATION-WIDE SCOPE OF THE MISSISSIPPI PROBLEM.

Emphasis of nation-wide scope of the problem of the Mississippi River and its tributaries was given by Frank B. Knight, Chicago manager of the Lidgerwood Manufacturing Co., before the St. Louis Drainage Congress. In the course of an elaborate address showing the business man's interest in flood protection, river regulation and drainage, Mr. Knight said:

Why do our business associations spend so much money and send their representatives to the Orient to develop a Chinese trade, the very elements of which they do not comprehend, when we have an undeveloped empire along the Mississippi River? The Mississippi Valley, containing 50,000,000 of the 75,000,000 acres of land that are now covered with swamps, would in a reclaimed condition add a net actual land wealth to the country, after deducting the cost of drainage, of over \$3,000,000,000, even at the modest acreage value of \$60 per acre, and would produce, measured conservatively in one staple, twice the value of the unprecedented corn crop of 1912. I do not want to burden you with figures, but conceive if you can the increased money-spending population that this drained land would represent, and then find, if you can, any business in this great country, from the great manufacturers of automobiles, farming machinery, wagons, etc., in the middle West, or the salmon fisheries of Puget Sound, or the cotton mills of New England, or the fruit growers of California and Florida, yes, even to the cigar manufacturer in Porto Rico or the Philippines, whose trade would not be expanded and whose productive capacity would not have to be increased. Why neglect this problem from a purely selfish point of view, if it be selfish, and I do not think that it is, of trade expansion? Why not assist in bringing about the adoption of the State and Federal co-operative plan for reclaiming our own inland empire? And, again, your attention is challenged to the fact that the drainage area of the Mississippi River and its tributaries, the land, I mean, through which these rivers flow, contains 1,242,650 square miles, or about two-fifths the total area of the United States, in which most productive portion of the country you are faced every year with the losses caused by floods, the interference with transportation and commerce, and the consequently reduced purchasing power of the people, to an extent of countless millions, without even considering the possibilities from reclaiming the present submerged land.

The MANUFACTURERS RECORD has time and again dwelt upon the importance to the whole country of the Mississippi basin as the great producing area of the country. Mr. Knight calls attention, in addition, to its importance as the great purchasing area, to be increased by a thorough and comprehensive control of all the problems of river control, drainage and irrigation bound up with each other. He would neglect none of the projects suggested or under way. He is for ever higher and ever stronger levees for many, and great dams on the Ohio, Tennessee, Cumberland and their tributaries; for great flood channels, as well as diversion and impounding works on the vast Missouri system; for river-bank revetment, and for complete and comprehensive drainage. None of these, however, is sufficient, he contends; all of them and others in combination with them must be used.

This is one of the broad views of the situation that must prevail in practical action to make possible a prevention of the loss of many lives and the enormous destruction of property in prac-

tically every year in the Mississippi. the standardization of the flow of streams for the benefit of internal commerce, the utilization wherever possible of stream flow for the development of hydro-electric power, the employment of surplus impounded water for irrigation purposes, and the complete reclamation by drainage of millions of acres of wet lands capable of becoming highly productive.

A MODEL FOR PUBLICITY.

Organizations contemplating the circulation of data designed to enlist the practical interest of investors and homeseekers ought to study the handsome booklet entitled "Youngstown, the City of Progress." It is published by the Chamber of Commerce of Youngstown, O., of which J. G. Butler, Jr., is president, and within its 96 pages in artistic typography, full of half-tone engravings, is a mass of definite and authoritative information about the city, its population, its municipal activities, its industries, businesses, distributing facilities, educational equipment and opportunities for capital.

SELF-PROPELLED BARGE.

Possibilities in New System of River and Canal Transportation.

[Special Cor. Manufacturers Record.]

New Orleans, La., July 10.

A new era of scientific inland waterway transportation service would seem to have been definitely inaugurated by the initial trip of the Alabama & New Orleans Transportation Co.'s self-propelled barge No. 1. The boat went from here to Pensacola with a cargo. This was discharged and a cargo of 800 tons of rosin and other forest products taken on in eight hours' time for unloading and reloading. Then the trip from Pensacola to shipside in the New Orleans harbor was made in 24 hours, maintaining a rate of 7 1/2 miles per hour. In the open Gulf a gale of 50 miles an hour was encountered and weathered without trouble or loss of time. The return cargo was the equivalent of 34 carloads, and it was delivered alongside of the ship at better than express speed. By train it would have been impossible to make the delivery on board ship before the sailing hour of the steamship, the Momus.

The time was one-fifth faster than express delivery, and the cost was four-fifths of what the freight charge would have been by train. The transportation rate covered insurance besides.

A few years ago, when Capt. A. B. Wolvin was establishing transportation service between New York and Texas City, where he and his associates were preparing to spend millions in providing the most modern wharves, docks, loading and unloading machinery and terminal facilities, he declared to the writer that there had so far been no scientific development made in the water transportation facilities of the South. Captain Wolvin had been a pioneer and prominent factor in the development of ship types and terminals on the Great Lakes, which have resulted in the most scientific system of water transportation known in the world. So his observation of conditions in Southern ports and shipping lines was made with the eye of a master. What is now being worked out in the application of modern, scientific methods to seagoing vessels and port facilities in the South had not been undertaken for the inland waterways of the South until Mr. John H. Bernhard, with his intimate, practical knowledge of inland waterway transportation systems in Holland and other countries of the Old World, organized the Alabama & New Orleans Transportation

Co. and proceeded to build self-propelling barges after models of his own designing. Two of these barges, of 1000 tons capacity, are now in service, and within a year the others of a total fleet of 16 will have been turned out from the company's shipyards on Lake Borgne Canal, near its junction with the Mississippi.

It is the purpose of the company to bring coal from the Warrior fields of Alabama at a shipping point above Tuscaloosa. On account of some repair work on locks and dams which the Government is making on the upper rivers, it will be some time in September before the barges will make trips to the coal fields, but meantime a tri-weekly service will be installed between New Orleans and Pensacola, with stops at Gulfport and Mobile as occasion arises. The barges may also be utilized for special trips to any point on the Mississippi River and its navigable tributaries as freight engagements justify.

Mr. Bernhard is very much gratified with the successful inauguration of his barge line service.

"This is a demonstration," said he, "of the way in which the rivers and canals of the South may be utilized in transporting heavy materials expeditiously, cheaply and in bulk. This is the field for the greatest usefulness of our type of vessels. The railroads will doubtless come to a realization that it is more profitable for them to handle perishable and more valuable products and materials, leaving low-priced and bulky freight for transportation by water. It will be of advantage to the shippers and producers of the South to develop water transportation along these lines, and the railroads themselves, as well as the country, will be benefited by the change suggested."

In speaking of the adaptability of his type of vessels to service in the inter-coastal canal and its tributaries, Mr. Bernhard stated that modifications could be made to suit any condition. "A 25-ton boat of the same design," said he, "ought not to cost over \$2500, and it could be run by one boy. A 100-ton boat ought to be built for \$10,000. For a 500-ton boat the cost should be about \$16,000, and for a 1000-ton boat, which is the size of these we are operating, the cost is \$30,000."

ALBERT PHENIX.

Paper from Cotton Linters.

The manufacture of paper from former waste product of cottonseed-oil mills, the short fiber lint that must be removed from the hulls before crushing, is to be introduced in the paper mill on the Gunpowder River at White Hall, Md., at which place paper has been manufactured for over 100 years. The present company operating here is the White Hall Paper Manufacturing Co. Extensive improvements are to be made, the output increased and special machinery for treating the waste cotton lint is to be installed in the near future. A siding from the Northern Central Railway will be laid into the grounds of the paper mill.

The improvements will be made under the supervision of the superintendent of the mill, John Clugston, who has developed the special equipment for treating the lint and for carrying out other economical processes in the manufacture of paper, including the quick removal of ink from printed paper waste. The contemplated improvements will greatly increase the output. They will include a new storage warehouse, power-house separate from the mill to decrease fire risks, possibly the installation of electrical generating plant and motors for operating the machinery, etc. Additional callender rolls will be added to the present machines,

and they will be speeded up to increase their output.

In the development of the manufacture of paper from "cotton-hull lint" several carloads of this waste product received from the Memphis Supply Co. of Memphis, Tenn., have been made into paper at an experimental mill, and Superintendent Clugston has recommended the installation of the process in the White Hall mill as a result of the success of the methods employed. The president of the White Hall Paper Co. is Robert P. Laughlin of the New York Paper Co., Baltimore.

FOR CIVIC BEAUTY.

Park System Planned by the Municipality of Rome.

[Special Cor. Manufacturers Record.]

Rome, Ga., July 12

Through the initiative of Mayor Ben J. Yancey, Rome is to have a system of parks and civic beauty spots that will equal in scope and beauty those of any city of its size in the country. Plans have been prepared by a responsible New York landscape architectural firm for three improvements, and if the proper influence can be brought to bear on the City Council so that it will appropriate a sufficient amount of money to see the project through, the parks will be ready for the public within a very short time. This aid is practically assured, but in case it should not be forthcoming there are a number of citizens that would be glad to subscribe enough money to see the excellent plans carried out.

"All we want to do here in Rome," Mr. Yancey stated, "is to get some real example of what these plans are. Once the people see the beauty of them, their assistance in the general welfare of the city and the consequent aid in enhancing the value of property in vicinity of the parks, public sentiment will demand more of them and better ones. And it is our earnest desire to give the public of Rome what it wants. We have seen this demonstrated in the case of the paving of the streets here. At first we were severely criticised for spending what seemed then money needlessly for the paving of one of the main streets, but just as soon as it was done and its usefulness apparent there was such a demand from that day to this that we now have one of the best systems of paved streets in the South."

One plan for a park is a treatment of the river banks at the foot of the main street. Here it is expected to build concrete jetties for boat landings. Then on the bank of the river in that vicinity plant grass around the several flights of steps that are to be erected to the street above.

On some city property on upper Broad street it is planned to make a general improvement, such as planting grass, trees, flowers, shrubs, etc., with the usual walks, drives and fountains. At present this is nothing more than a vacant lot that has been useless property that has belonged to the city for years. It adjoins the new Carnegie Library, and its beautification will doubtless add to that of the library and grounds.

The third idea is expected to take shape in the form of a plaza that will take the place of one of the city's most flagrant eye-sores. The plaza is to be constructed over what was originally intended to be the continuation of Fourth avenue, but on account of the steep grade up to and passing the present site of the city high school it has never been used, and is now nothing more than red dirt interwoven with gulleys filled with trash and such. The plan is to place at the top of the hill in the center of a grass plot an art fountain. This grass terrace will extend on

down the side of the hill to a fish pool, which will parallel the intersecting street for several yards and will be furnished with fresh water from the fountain above through underground pipes. On either side of the terrace will be flights of steps the whole length of the incline. The trees will be planted and the present ones trimmed so that a clear vista from the foot to the summit of the hill can be had.

This is one of the leading examples of the new life municipal Rome is taking on.

ROY G. BOOKER.

To Develop 65,000 Horse-Power.

The Tri-State Power & Milling Co., O. L. Stearnes, president, Salem, Va., has applied to the Public Service Commission of West Virginia for permission to condemn land and construct a dam on New River below Anderson Falls, in Summers county, West Virginia. It is estimated that 2776 acres will be flooded, including river bottom and hillside land along the New River, besides islands in New River, backing up the water about 20 miles to "The Narrows," in Virginia. About 34,812,000,000 gallons of water will be impounded. The dam is to be 50 feet high, with tainter gates and flashboards 10 feet high, its base to be about 98 feet wide, with wall 900 feet long at crest. It is to be built of cyclopean masonry and contain about 90,000 cubic yards of masonry, developing 65,000 horse-power for electrical transmission. This company was previously reported incorporated to undertake hydro-electric developments along New River in Summers, Mercer and Monroe counties, in West Virginia, and Giles county in Virginia, its purpose being to transmit electricity in West Virginia, Kentucky and Ohio.

Alabama State Electric Plant.

The \$125,000 hydro-electric plant which the State of Alabama has been building at Speigners is now complete. It is transmitting electricity for light and power in the Alabama Cotton Mills, operated by convict labor. The power-house is of concrete block construction, and the dam proper is of reinforced concrete, with a clay dyke about one mile long. Electricity is transmitted from the power-house to the mill, a distance of about 2300 feet, through underground cables. The electrical machinery includes two 27-inch turbines, one 15-inch turbine, two 350-kilowatt generators, 55, 50, 20, and various other generators, nine motors distributed throughout the mill, etc. F. C. Alexander of Birmingham was the engineer in charge of construction, and Edgar B. Kay of University had general supervision. The cotton mill has 9000 spindles, 234 looms, 82 cards, etc., for a daily output of 15,000 yards of seven-ounce osnaburg.

Handling Merchandise Through Warehouse.

A warehouse is being built at Columbia, S. C., for the purpose of storing merchandise for people in that city and also for handling the accounts of outside firms. The object of the Merchants' Warehouse & Distributing Co., which is undertaking this scheme, will be to distribute freight from Columbia, and, according to a letter from the company, goods may be shipped to that point in carload lots and delivered to all important towns around at less than carload rate from Columbia, effecting a saving in freight rates, and goods shipped direct from distant points will, it is thought, be delivered in better condition than if shipped at less than carload lots. The plan is feasible in many parts of the South, and might be carried out to advantage in other places as well as Columbia.

The Proposed Currency Bill as It Affects the Southern States

By HON. CHARLES N. FOWLER of New Jersey.

[Mr. Fowler was for sixteen years a member of Congress, for fourteen years a member of the House Committee on Banking and Currency and for eight years chairman of that committee.]

In commenting upon the proposed currency bill for the benefit of those who are to be most affected by it I cannot forbear the impulse to invite your readers to inquire, first, what they should have and what they have a right to have before attempting to demonstrate what a fatal mistake it would be to pass the proposed measure.

I will, however, in the outset make two statements, about which there is, in my mind, no doubt whatever. First, the proposed currency bill is drawn at variance with and in utter defiance of every fundamental principle of banking economics, and apparently in total ignorance of the banking experience of all time; second, that if the American people are given an opportunity to discuss the proposed currency bill for one year, they will be amazed that any such a proposal could ever have been thought of seriously.

The proposed currency bill is as absurd, considered from the standpoint of constructive legislation, as it would be to attempt to build a house by first putting on the roof.

Now, let us start with the foundation and note how a financial and banking structure should be created in accordance with economic law and in the light of experience.

Gold is our standard of value, and our gold coins are our only money and the only true measures of value we have. These coins are the \$2.50, \$5, \$10 and \$20 pieces. These pieces of gold not only measure the value of all our commodities, such as cotton, rice, sugar, peanuts, peaches and every other material thing, but the same coins measure all obligations—United States Government, State and municipal bonds; also all commercial obligations, including the deposits in the banks and all bank notes.

It must be self-evident to everyone that if every form of debt must be redeemed in gold, in order to keep its value equal to gold, then no form of debt should be thought of as money. For example, the gold certificate is a warehouse receipt for the amount of gold its face calls for. It does not differ in the slightest degree from a cotton certificate for a bale of cotton; both are simply warehouse receipts; each of them corresponds to a trunk check. Certainly no one will contend that a trunk check is a trunk, that a cotton certificate is a bale of cotton, nor that a gold certificate is gold. Much less is a United States note gold because it says upon its face that the United States "will pay the bearer" so many dollars, necessarily meaning so many times 25 8-10 grains of gold nine-tenths fine, which constitutes our dollar, our unit of value.

Precisely the same statement can be made about a bank note, which says that the bank which issued it "will pay the bearer so many dollars on demand."

From these simple truths it is clear that the only thing that ought to be held as reserve in a bank is gold or its substitute, the gold certificate, because every other form of currency, being a debt, must be redeemed in gold, and therefore is not fit for a bank reserve.

When the act establishing the Bank of England was passed it provided that the bank could make up 25 per cent. of its reserves out of silver, but the directors of the bank do not allow silver to be counted as a part of the reserves, because it is necessary to redeem the silver in gold to make it as good as gold; therefore, it is not fit to be held as a reserve.

Let this important fact, then, be fixed eternally in the mind, that gold, and gold alone, should constitute our bank reserves just as soon as we can pay off the \$346,000,000 United States notes or greenbacks now outstanding. The foundation of our financial and banking system, then, must be a sufficient amount of gold to carry at all times the burden of credit we place upon it. To guarantee such a quantity of gold beyond all peradventure we must have a single central gold reserve and power lodged somewhere to fix the price of gold, every day if necessary, to control the movement of gold to and from the United States. That price of gold would be the same everywhere throughout the United States, although commercial credit might and would show a thousand variations—yes, a hundred thousand—expressing themselves in manifold forms and always reflecting the conditions of trade.

This great truth was illustrated before the war in a most conclusive way in the grand old Commonwealth of Virginia, where, for that time, they had a well-high perfect banking system. The Bank of Virginia was established in 1804 with a capital of \$1,500,000, and had branches at Richmond, Norfolk, Petersburg, Fredericksburg, Staunton and Lynchburg. This bank could issue notes equal to three times (\$4,500,000) the amount of its capital, providing it always had a reserve of 20 per cent. in gold to protect them. Six of these banks were established. They were very prosperous, and from 1827 to 1860 kept out an average of \$10,000,000 in notes. There is no case on record where a Virginia bank of circulation and deposit ever failed, and no one ever lost a dollar by holding a Virginia bank note previous to 1861. The sequel of success was ample gold coin reserves and quick current coin redemption. On January 31, 1860, the amount of bank notes outstanding was \$9,812,000, while the deposits were only \$7,729,000, and the specie on hand was \$2,943,000. It has occurred to me that if President Wilson, Mr. Owen and Mr. Glass, all sons of Virginia, should take a month to study banking in Virginia before the war and a year or two to meditate and investigate the subject, they would all want to forget their present offspring, and I am sure each would want to escape the responsibility of its paternity by charging it upon the others. A very drastic but mar-

velous banking system existed in Louisiana also before the war, where more gold had been accumulated in its reserves than could be found in any other State except New York.

Prior to 1860 Kentucky, too, had an absolutely sound banking system, as had Ohio, Indiana, Iowa, Missouri and the six New England States. They were all based upon identically the same principles—first, ample coin reserves; second, interchangeability of deposits subject to check and bank notes; third, quick current coin redemption. Any banking system founded upon these principles establishes three facts at once:

First. That it must necessarily be sound in principle.

Second. That the customers of one of these banks could always get credit in precisely the form that would best serve their purposes, whether a current credit in the form of a note or a deposit credit subject to check.

Third. That the two credits, the deposit credit and the note credit, are identical, differing only in form—one, the check, passing with an endorsement, and the other, the note, passing without any endorsement; also that the cost of each is identical, namely, only the cost of the amount of reserves held. That is, if a bank holds a reserve of 20 per cent. against its note issue and 20 per cent. against its deposits subject to check, bank notes will cost the customers the same as the use of a check. The profit to the bank will be identically the same, also, except the additional cost to it of the plates and printing of the notes.

Now, mark this, the people have a right to have bank credit in the form that will best suit or serve their convenience, and it is the duty of the bank to furnish it for them. However, if a bank must sell something to buy the currency its customers want and pay 100 cents on the dollar for it, instead of creating it out of its own credit at a cost of only one-fifth or one-sixth as much, the people must pay this additional cost, for the banker will get his profit; you can depend upon that.

Not only will the currency the banker buys cost him five or six times as much as it ought, but you must add to this the cost of putting up and shipping away the paper; the cost of maintaining the organization that is going to provide the notes or currency which the banker is compelled to purchase in order to meet the legitimate demands of trade.

Some 60 years ago Canada copied the banking law of Massachusetts and has been improving upon it, until now it may be asserted that Canada has the best banking system in the world. Its bank notes and bank deposits are interchangeable—convertible the one into the other. The expansion and contraction every fall during the crop-moving period approximates \$4 per capita. The same expansion and contraction here, where conditions are similar, would give us an expansion and contraction of about \$400,000,000 every fall. The amount of currency under such a system can never be too great or too small, but always just precisely equal to the requirements of trade, because the bank notes are sent to the clearing-houses every day along with the checks, and both are paid in gold by paying the balance due in gold coin.

But are they safe? They are made, just as our present bank notes are, and in precisely the same way, by making them a first lien upon all the assets of the bank issuing them. In addition, Canadian banks keep an insurance fund of 5 per cent. of the amount of notes outstanding. No one has ever lost a dollar in holding a Canadian bank note since the system was established, more than 60 years ago. Nor did anyone ever lose a dollar by holding the bank notes of Virginia, Louisiana, Kentucky, Ohio, Indiana, Iowa or Missouri, where identically the same banking principles were in operation before the war.

All business today is carried on under the protection of the insurance principles except banking alone, where every bank carries its own insurance.

During the past 50 years the experience of the national bank system shows that a tax of one-fifth of 1 per cent. upon all the notes outstanding would pay the notes of all the banks that have failed; therefore, an insurance fund of 5 per cent., such as the Canadian banks have established, would cover all possible losses for a period of 25 years.

Again, let it be noted here, and never overlooked nor forgotten, that a tax of one-eighth of 1 per cent. upon the bank notes issued under the Suffolk bank system of New England would have paid all the notes of all the failed banks, and this, too, although the note issue was from 33 per cent. to 50 per cent. greater than the deposits subject to check.

As our business has grown, and railroads, telegraph lines and telephones have brought the whole country into immediate relations and speaking distance, there has grown up as an integral part of our banking machinery the only additional factor that is necessary to give the whole United States as coherent, sound and economic a banking system as Virginia had before the war, and that one factor is the American clearing-house, which in its most highly developed form has established these four functions:

(1) The clearing-house committee.

(2) The clearing-house examiners.

(3) The clearing-house reserve.

(4) The clearing-house currency supplies, by issuing cashiers' checks in case of necessity, as in 1907.

Every one of these functions has been developed as a matter of convenience

or necessity without the aid of law and in a measure in actual defiance of law.

To give to the United States the soundest, the most economic and the most efficient banking system in the world only requires the organization of our clearing-houses in all of our commercial centers into a harmonious system, and applying to the system the same principles of banking economics that were in force in Virginia, Louisiana, Kentucky, Ohio, Indiana, Iowa, Missouri and the New England States before the war and that are in operation in Canada today.

Such a co-ordination and unification of these peculiarly American institutions will set every individual bank literally and absolutely free, and will at the same time render every section of the United States as free and independent of every other section as France is of England and England is of Germany, and will enable the United States to protect itself against the demands for gold now coming from every quarter of the globe, because every nation is now upon the gold standard and is bidding and struggling for gold to meet the urgent demands of commerce.

The proposed currency bill does not establish a single central gold reserve, which is absolutely essential if we are to protect ourselves against the demands for gold coming from all parts of the world.

The proposed currency bill confuses the price of commercial credit with the price of gold, and treats them as one and the same thing when they are two absolutely different and distinct things, and the necessary result of putting his proposal into operation will be the certain expulsion of gold from the country, not only imperiling all commercial credit, but the credit of the United States Government as well.

To illustrate the force of this assertion, let me remind your readers that the Bank of England, while in constant touch with the greatest commercial credit market in the whole world, is not a dumping ground for commercial credit at all, but always stands above the general market, ready to check it by raising the price for gold, and as a last resort help the market if it has reached a point of extreme necessity.

The proposed currency bill, if passed, would soon bring the commerce of the country to the point of extreme necessity, with no power above and beyond the commercial credit market to save it.

Every student of this subject knows what this means even if the author of this bill will have to wait to find it out as the result of the sad havoc he, in his ignorance, is determined to bring upon the commerce of the country.

The proposed currency bill would, if enacted into law, and enough banks remained in the system to operate it, compel the shipment backwards and forwards over the country and the sale of from \$10,000,000,000 to \$12,000,000,000 worth of commercial paper to adequately supply the country with currency; that is to say, \$1,500,000,000 per annum, or approximately \$15 per capita. This is self-evident, because the life of the paper sold cannot exceed 45 days; therefore, it is fair to assume that the average life of the paper turned over to the Federal reserve banks could not exceed 30 days. As 30 days is contained in 360 days 12 times, therefore it would take \$12,000,000,000 worth of paper to furnish the country only \$1,000,000,000 of currency during the year, to say nothing of creating other forms of commercial credit. Figure it any way you please and see where you land!

Stop a minute and think of the interest and taxes on this proposed currency, the cost of transportation, of handling the paper and the expense of maintaining the organization, in order to do something as useless as a fifth wheel to a farmer's wagon and as dangerous as the same wagon loaded with dynamite.

But why all this trouble, expense, danger and certain calamity as a result of operating the proposed organization? It will be a maw into which every dollar of maturing paper is to be poured, amounting in the aggregate to \$10,000,000,000 or \$12,000,000,000 a year at the least calculation, while Canada, just over the line, is furnishing her people an absolutely sound, a perfectly responsive, a most economic and a most efficient currency; indeed, all things considered, the most perfect bank currency ever furnished in this world, without selling a single dollar's worth of commercial paper or incurring any additional expense whatever, even to the extent of a single cent, beyond the ink it takes to make the necessary entries in the books of the bank, converting a deposit subject to check into a note debt or note liability.

Is not so great, such an appalling and unnecessary expense and so much additional machinery to get something not half as good sufficient to put any intelligent man upon inquiry? Should it not cause every intelligent man to pause before committing his country to such a staggering program?

Did the authors of the bill ever inquire how much commercial paper there was in the national banks that would come strictly within the rule laid down—"45-day paper?"

The New York *Financier* of July 5 estimates that the amount of commercial paper on which rediscounts or note issues might be based does not exceed \$1,000,000,000.

Have the country national banks got through figuring where they are coming out after they have parted with 20 per cent. of their capital upon which they are to draw the liberal dividend of 5 per cent., even though they may be located in some new, partially developed section where their deposits are small and they are compelled to turn their capital quickly and often in the year to make it pay? Have they noted that even the 2 per cent. upon their reserve balances are to be taken away from them?

Have they been running over their paper to find out whether there was now among their assets or ever would be any 45-day commercial paper?

I assert that there is not one national bank in a hundred that could possibly have any use whatever for the proposed currency bill unless as a dividend-reducing proposition, without a single compensation to offset the losses.

Much stress has been laid upon the necessity of some rediscounting scheme, although investigation of this phase of the question discloses the fact that the total amount of paper rediscounted or money borrowed by all the banks in the United States—25,195 of them—on June 14, 1912, was less than \$150,000,000, while the capital stock of the same banks exceeds \$2,000,000,000.

In other words, the rediscounts or money borrowed amounted to only about 7 per cent. of the capital of the banks. On September 4, 1912, the total amount

borrowed, evidently for crop-moving purposes, had reached \$200,000,000, or 10 per cent. of the capital.

Upon this important point the New York *Financier* uses this significant language:

"It may also impress some bankers to know that of this \$150,000,000 borrowed by all banks on June 14, 1912, some \$83,000,000, or 55 per cent., was borrowed by the banks in the 13 Southern States and Oklahoma, with aggregate capital stock of \$375,000,000, against \$66,000,000 only borrowed by the banks in all other parts of the United States, with \$1,650,000,000 of capital stock.

"The borrowings of the Southern States and Oklahoma, due chiefly to the cotton-crop movement in these States, amounted to 22 per cent. of their capital stock, while the borrowing or rediscounting of all other banks amounted to only 4 per cent. of their capital stock."

From these facts it must be apparent that the greatest sufferers from the infliction of the proposed plan upon the country would be the Southern States, where the borrowing is heaviest.

If the banks of these same States could create their own currency in abundance by converting their bank-book credits into bank-note credits, as the banks of Virginia and Louisiana did before the war, it is probable that their necessity for borrowing would be more than cut in two and possibly might almost entirely disappear.

It is chiefly on account of the tremendous demand for currency throughout the fall to pick and market the cotton crop that these loans are now made. Of course, there would be an actual need for additional capital, but if our reserves could be retained by the banks instead of being shipped away into the wheat fields and cotton fields to do the work that a true bank-note currency would do just as well, the additional capital required would be very easy to get.

Today we are compelled to take gold certificates, United States notes and silver certificates, all lawful reserves, and ship them out into the agricultural regions to do the same work that is being done in Canada by a true bank-note currency.

Why don't we do the same thing here?

It would not cost the farming communities more than a quarter as much. Relatively speaking, the greatest expense and loss due to this inexcusable economic blunder is now being borne by the Southern States, and yet the Southern States are expected to bind a still heavier burden upon their backs than they now carry by the passage of the proposed bill.

The currency bill proposes to transfer to and superimpose upon the banking conditions of this country an entirely foreign device which is wholly unsuited to the successful co-operation of 25,000 individual, independent banks. If workable at all, it would be utterly impracticable and useless from the standpoint of the average American bank.

It is fashioned after the German scheme which has kept Germany in financial straits for several years, and made her financial position a peril to all Europe and to us as well.

The greatest and most prolific source of danger to the production and transportation of consumable commodities in this country today is the constant transfer of our commercial capital to fixed investment.

The cry now raised is to liquefy the assets of banks for the purpose of still further facilitating this fatal conversion. Instead of liquifying the commercial assets, the bank should be liquidating their bond investments.

This constant and too rapid conversion of our commercial capital into fixed investments in the form of stocks and bonds is the greatest danger to our commercial prosperity and the curse of our time from the business point of view.

Our conditions are peculiar to ourselves; our problems are peculiarly our own, and we have already solved them through the process of evolution without any law, and even in defiance of law, if we only new enough to know it.

If we fully comprehended the development that is going on, we could see the counterpart of a great branch banking system in our clearing-house system, and that economically and organically we shall in the end attain the efficiency of branch banking and still retain our individual, independent banking units. Shall we now disregard and discard all of our experience before the war and this marvelous evolution since the war? Shall we now proceed to again fly in the very face of fate?

The proposed bill is born of hysterical anxiety. The apprehensions are not well founded.

First, because liquidation has been pushed steadily for a long time.

Second, because of the changes in the tariff schedules, there will be a recession in the demand for bank credit for manufacturing purposes reaching into the billions—at least two or three billions. To this decline in the demand for bank credit there will be certain offsets which it is not necessary to discuss here.

This bill is born of stupendous ignorance of all economic law and historic incident on the part of those who brought the material to the President for his fashioning.

It is born, too, of blind political madness on the part of others who seem to have had the power to dictate that there shall be no bill unless founded upon the principle of Government fiatism.

It is now up to the members of the Senate and the House from the great South to say whether the experiment of John Law, the French Revolution, our colonial and continental Government, and this Government during the war, shall again be tried out, with all its appalling consequences.

It is now up to the members of the Senate and the House of Representatives from the great South to say whether the most gigantic system of commercial credit that has ever existed shall be turned over to the political tyranny of seven men; indeed, a fit counterpart of fiat issues of credit to take the place of gold.

It is up to the members of the Senate and the House from the great South to say whether they will take time to study this most important, this vital, question before it is too late, and come to a deliberate and intelligent conclusion, one in perfect harmony with all the traditional thought of the Democratic party down to 1860 upon Government issues, or whether, in reckless haste, they will thoughtlessly sow to the storm of devastating waste. There is no part of

the country that is more involved and interested in wise action than the South. Every banker and every business man should call a halt and ask his Senator and his Congressman to wait until this question has been studied and all fallacies have been eliminated.

It can do no harm to wait, because the notes of the proposed Federal Reserve Bank cannot be furnished for the 1914 crop period, to say nothing of 1913, while hasty action will bring incomparable and irreparable injury to the whole country.

The members of the Senate and the House of Representatives are waiting to hear from the great army of readers of the MANUFACTURERS RECORD.

What would they do if it were their own personal affair? But it is their own personal affair, and belongs to no one else.

What are you going to do about it? Think it over and act deliberately or take the blind plunge? That is the question.

Expenditures by Railroads.

ADDITIONAL INFORMATION ABOUT OPERATIONS OF COMPANIES IN SOUTHERN TERRITORY.

Several weeks ago the MANUFACTURERS RECORD published an interesting series of letters from the presidents of railroads operating in the Southern field showing expenditures for betterments and additions in the five years, 1908-1912. Additional statements follow.

NEW ORLEANS GREAT NORTHERN RAILROAD CO.

President, H. I. MILLER.

Total amount of money spent by our company in the fiscal years 1908-1912, inclusive, upon extensions of lines, double-tracking, side-tracking, new freight or passenger depots or enlargements of the same, additions to terminals, additions to rolling stock and other equipment, and all other betterments calculated to improve the service of the system and to facilitate freight and passenger traffic:

Expenditures for extension of line.....	\$4,605,592 94
New tracks and sidings.....	278,271 02
Station buildings.....	37,373 60
Fencing, telegraph lines and miscellaneous structures.....	20,126 74

\$4,941,364 30

Addition to rolling stock and other equipment:

Passenger cars.....	\$ 69,790 28
Freight train cars.....	793,202 91
Work equipment.....	16,956 39

879,949 58

Making a complete total of.....\$5,821,313 88

The amount (of the above) derived from current income was \$750,141.02.

The amount derived from the sale of bonds or other securities was \$5,071,172.86.

No payments have been made for dividends in the period covered.

The amount of money paid in interest upon bonds or other securities marketed for the purpose of raising funds for permanent improvements was \$1,840,900.

ATLANTIC COAST LINE RAILROAD CO.

President, T. M. EMERSON.

The expenditures of the Atlantic Coast Line Railroad Co. for additions and betterments for the five years ended June 30, 1912, were as follows:

Road.....	\$10,632,392 65
Equipment.....	7,635,777 22
General expenditures.....	259,931 50

Total.....\$18,528,101 37

During these five years there was added to equipment 100 locomotives, 127 passenger cars, 7260 freight train cars and 118 work train cars.

ATCHISON, TOPEKA & SANTA FE RAILWAY SYSTEM.

President, E. P. RIPLEY.

Respecting our Texas lines, I give below figures covering substantially the field for the five years, July 1, 1907, to June 30, 1912:

New lines (542.6 miles).....	\$14,007,857 61
Side-tracks.....	762,845 82
Station buildings.....	639,435 12
Terminal facilities.....	1,088,698 82
Other additions and betterments.....	8,201,448 55

Total.....\$24,700,285 82

Mileage June 30 (1907) 1989.42.
(1912) 2532.02.

Interest payments due.....	\$11,921,307 52
Interest paid.....	9,082,405 04
Income applicable to interest and dividend.....	9,909,513 86
Dividends.....	652,550 94
Accumulated surplus.....	174,557 88
Net loss.....	2,664,344 60

Bonds decreased.....	\$237,000 60
Certificates of indebtedness.....	\$1,700,372 70
Notes.....	11,592,679 64
Equipment notes retired.....	287 172 60
Loans to be funded.....	9,527,212 32

Deduct decreases.....\$524,172 60 \$22,829,264 66
524,172 60

Net increase in indebtedness.....\$22,305,092 06

Generally speaking, the Santa Fe Texas lines do not possess their own rolling stock, so that it has been impossible to make up any satisfactory statement covering our Texas lines equipment.

\$700,000,000 for Texas' 1913 Crops.

PROMISED WEALTH IN COTTON, CORN, WHEAT, RICE, SUGAR, FRUIT AND VEGETABLES.

[Special Correspondence Manufacturers Record.]

Houston, Tex., July 8.

Abounding prosperity, heaped up, pressed down and overflowing, seems the destined end and way of Texas for this '13 year of most amazing grace. Crops, bumper crops in numerous lines, so much so that \$700,000,000 is the figure now set for the total value of this year's products of the soil in Texas, have not only routed the hoodoo of the '13 number, but have overcome—or threaten to—all the combined powers of chimerical and crusading politicians between Austin and Washington to molest the producer, make him afraid or prevent him from reaping a golden reward. Adverse weather conditions may change present prospects here and there, and floods as well as droughts are not always absent from every portion of this vast area of 265,000 square miles; but so universally is the outlook favorable now that prosperity and plenty are predicted for practically every nook and corner of the Lone Star State. When weather conditions are right for crops that are in the ground the farmer, in that day at least, is pretty much in a position to let the tariff tinkerer go hang.

Think what \$700,000,000 of new money from the soil means for this State. With a population of 5,000,000, in round numbers, it means \$140 for every man, woman and child, white or black, rich or poor, halt, maimed or blind, the State contains. That it will not be distributed and individually portioned out detracts nothing from the significance of the output, for not even the humblest or the poorest can escape the benefits of the prosperity which will ensue. Better roads and bridges, better streets and schools and public utilities will come as the results of crops like these, and new people will be attracted from afar, so that the lands will be more thickly populated, the cities gain a greater growth and the values of all property and the values of all business greatly enhanced.

There has never been a year when all crops and all sections seemed so favored. Despite the abiding necessity for fighting the boll-weevil in many sections, and the fact that in the main the crop is somewhat backward, cotton has so good a start and is generally in such favorable condition that a record crop of 5,000,000 bales is the common prediction now. This will be in the neighborhood of one-third of all the cotton the United States will raise. There is much significance, by the way, in the fact that a new plan for financing the cotton crop in Texas has been worked out by the Farmers' Union officials and the banks, by which the cotton farmer is enabled to carry his cotton without embarrassing expense, and the banker has a sure security and a lucrative return. It is believed a way has been found to remove the occasion for the cotton raiser to rush his bales onto the market as soon as picking and ginning can be done, with the expected result that a very satisfactory price will prevail in cotton this year. With a third of the crop in hand it would certainly seem that Texas might get herself in position to speak words of much power in the places where prices of cotton are fixed.

From all over the State there are reports of great corn prospects. Here and there unfavorable weather conditions have recently occurred, but nothing so serious as to justify a material change

from the earlier estimates of 200,000,000 bushels of corn as the Texas crop.

In this connection it is due to accord great praise to Col. Henry Exall of Dallas, organizer and head of the Texas Industrial Congress, whose main activity has been in the line of stimulating the boys and men of the State to raise more and better yields of corn. With a \$10,000 prize fund, divided into a large number of separate prizes, the organization has been productive of an enormous amount of stimulative influence and has been a powerful factor in giving Texas ever-increasing importance as a corn-growing State.

There have been good rains in the Panhandle, so that grass and forage crops look very fine. All through the State, wherever grass grows for grazers' use, or where alfalfa has been introduced, or Kaffir corn or milo maize, conditions are reported to be almost universally all that anyone could desire. Stock raisers and feeders will later on give demonstration of what this means as a factor in the wealth production of the State.

There has not been a bumper wheat crop in Texas this year, but it has been an average one, of a good quality of grain, and will yield a total of 11,000,000 bushels or more. Not all of Texas is adapted to wheat growing, but it should not be overlooked, in an appraisal of the agricultural possibilities of the State, that Texas wheat and flour have taken premiums at national fairs and international expositions.

There will be a good rice crop this year. Rice in Texas is grown along the coast, all the way from Beaumont to Matagorda and beyond. Some of the finest rice farms in the South are in this belt, and the Texas yield this year will be large in extent and excellent in quality.

Southwest from Houston, and extensively prevailing in the Brownsville section, cane growing has been of increasing magnitude and importance. The crop this year never looked better, nor has the acreage ever been so great. The industry was becoming a well-established one, with several mills, central refinery, etc., and the fact that a high sugar content was present and replanting was not necessary so frequently as in Louisiana gave promise that a large development of the sugar industry in Texas would occur. Whether tariff legislation will give the industry a mortal blight remains to be seen. In Louisiana, where they have been raising cane and making sugar for more than a hundred years, and where they are so highly specialized in every feature of sugar production that they have adapted and invented processes and machinery that have been adopted in sugar-growing sections throughout the world, it is freely proclaimed that the proposed tariff will wipe out the whole sugar industry of the United States. Whether places that show an especially rich yield, and where infrequent plantings are not required can adapt themselves to the new tariff rate remains to be seen. Anyhow, the sugar crop of Texas will contribute a considerable amount to the agricultural prosperity of the State this year in any event.

The fruit and vegetable crop of East Texas was large and profitable this year, and the strawberries of the south and the

truck of many sections helped to swell a total of notable proportions.

In the early cabbage and onion-growing sections there was an overpowering embarrassment of riches. Because of market conditions in the large centers, where the supply was much of the time ahead of the demand, great quantities of cabbages were never cut at all, but were allowed to rot in the fields, and many onion growers failed to reap ordinary rewards because of the same glutted conditions of the markets. This situation has caused a widespread agitation of the importance of diversification. The one-crop idea, whether of cotton, corn or truck, is denounced in many well-informed quarters as inimical to every interest in the long run. With cattle and hogs decreasing throughout the country today, it is pointed out that any scheme of well-rounded agricultural development must include a certain degree of attention to the raising of staple crops and stock, and the great, certain and constant prosperity of these lower Southern States is no less than the sections farther north, where no such variety of products is possible as down here.

Taken all in all, the crops of 1913 in Texas mean wonders for the development of the State. The situation in Dallas is proof of the fact. The commercial center of one of the richest agricultural sections anywhere, as thickly populated as many of the farming sections of the older States, there is already a building activity under way in Dallas that indicates the expenditure of some \$12,000,000 in buildings during the ensuing year or so. Dallas is going to have the national corn show next year, which will give added impetus to her great, substantial commercial growth, based on the magnitude of her agricultural environment.

With big crops come developments of all kinds. Good roads will be an especial beneficiary. Texas is already setting a mighty pace in good road construction, for any of the Southern States, at least. Just now in Navarro county one of the most interesting and important works of the kind to be found anywhere is being undertaken. Based on a bond issue of \$400,000 to construct a series of good roads radiating from the county-seat of Corsicana to the county line in every direction, the Fred. A. Jones Engineering Co. of Dallas and Houston has been employed to get up an exhaustive report on good roads construction, to the end that the very best kind of road, irrespective of difference in first cost, may be selected as the type best suited for that section. Also, every culvert and bridge is to be of reinforced concrete and amply wide. So interesting and important has the subject of good road construction become in Texas, and so evident does it seem that the movement will proceed with greatly accelerated speed hereafter, that this extensive organization of engineers is preparing to install a department entirely devoted to good roads construction.

All over the State—around Houston, around San Antonio and in many other places—increased wealth, based primarily on the big crops Texas grows, is suggesting, justifying and inaugurating good roads and all the other comforts, conveniences and elegancies that are only possible when prosperous times abound.

ALBERT PHENIX.

The joint summer meeting of the Maryland State Horticultural Society and the Peninsula Horticultural Society will be held at Berlin, Md., July 31, when the members will be the guests of J. G. Harrison & Sons.

The Birmingham Iron Market.

[Special Cor. Manufacturers Record.]

Birmingham, Ala., July 12.

The resumption of business after the suspension around July Fourth has developed numerous inquiries for all of the several products, and the tonnage actually booked so far in July is quite satisfactory to the various operators.

Pig-iron producers have effected the sale of some 15,000 tons of foundry grades since last report, and have successfully maintained prices against further decline. By this it is meant that no lower figures are now obtainable than during the last half of June, but not that prices are more uniform. The selling prices reported in the week range from a basis of \$10.50 per ton to a basis of \$11.25 per ton at Birmingham for No. 2 foundry, and the average consideration can hardly be arrived at with accuracy. A single lot of 3000 tons for delivery over the remainder of the year is reported sold at \$11 per ton at Birmingham. The same figures are understood to have just been paid for 1000 tons of No. 2 soft for comparatively early delivery. Carload quantities and lots of 100 to 150 tons, and lots of 500 tons and 750 tons of Nos. 2 and 3 foundry, respectively, are reported sold at \$11.25 per ton for No. 2 foundry; however, similar quantities were entered in the week on a \$10.50 per ton Birmingham basis, and such figures are still being quoted conditionally. The largest producing interest adheres strictly to a basis of \$11 per ton at Birmingham for any delivery within the remainder of the year, and will no doubt maintain such figures. In this particular case the stock accumulation is not cumbersome, and the production has been closely adjusted to order-book requirements. With one exception, the other large producers are disposed to maintain the same schedule as just mentioned, but are desirous of moving the tonnage now on furnace yards, and in some cases are without shipping instructions to take care of all of the daily make. In the case of the exception mentioned, the unfilled tonnage is not considered sufficient to warrant furnace operations, and it is proposed to continue the present rate of production even if a \$10.50 per ton Birmingham basis is necessary. Such a condition accounts for the sales made in the week at a \$10.50 schedule, and for the quotations still being made on such a basis. Furnace operations have not been changed since July 1, but shipping instructions have been increased by practically the whole of the foundry trade, and with some 3000 to 4500 tons just entered for immediate delivery, further improvement in this connection will no doubt be shown in the forwardings of the next 10 days. The improvement in the demand for spot deliveries is probably the most encouraging feature of the market just at this time, although recent inquiries indicate a very liberal requirement in all quarters. Practically all Southern foundries have resumed operations after the semi-annual slowdown, and are consuming raw material at a normal rate. Such conditions are also indicated in the North and East by inquiries received from such sources, but, as the pig-iron market indicates, the volume of new business for all lines of foundry trades is somewhat smaller than that of some months ago. It is conceded that the adjustment of the supply to the demand more closely is necessary in all quarters, and most essential in the matter of pig-iron production. The present active furnace capacity is small compared to that of January 1, and, not including the stock on furnace yards, order-books still indicate an overproduction. This condition is to be partially

overcome by the plans already adopted for a further curtailment in the make, and unless the demand is stimulated very materially by the recent developments in the matter of price, it is quite likely that additional furnaces will be blown out.

Charcoal iron producers do not report recent sales of consequence, and are not making deliveries in all cases at the rate originally agreed upon. However, this last will no doubt be overcome in the next ten days with the resumption of operations at certain large car-wheel foundries.

The only development in the basic iron market is the announcement that certain furnaces of a leading interest will not be changed from foundry grades. Without this change referred to, the make will continue in the hands of local consumers.

For delivery in the remainder of the year the schedule below is considered the market for the several grades, although, as has been stated above, a certain local brand is being offered conditionally at prices 50 cents per ton lower than those quoted. We quote as follows per gross ton at Birmingham furnaces, viz.:

No. 1 foundry, \$11.50.
No. 2 foundry, \$11.
No. 3 foundry, \$10.50 to \$10.75.
No. 4 foundry, \$10.25 to \$10.50.
Gray forge, \$10.25 to \$10.50.
Mottled, \$10 to \$10.25.
Standard basic, \$11.
Off basic, \$10.50 to \$10.75.
Warm blast charcoal iron, \$23.50 to \$24.50.

The Ensley plant of the Tennessee Coal, Iron & Railroad Co. has just forwarded 15 carloads of standard steel rails for the requirement of the Southern Pacific Company, but the placing of additional large orders is not mentioned. The producers of light steel rails are in position to make deliveries more promptly, and in certain directions will not doubt shade prices last quoted. Orders for bars and round iron are in fair volume, and shading by the smaller producers is not so generally complained of. The Alabama City mill is still understood as well supplied with finished wire product orders, and the structural material shops at North Birmingham and in the city are employing a regular force.

All grades of old material continue to drag on the market, without prospects of an early improvement. Dealers are in no case adding to their holdings, and consumers continue to buy from hand to mouth as bargain lots are offered. Cast scrap is weaker, relatively, than any other grade, while heavy melting machinery scrap has recently sold at lower figures than have been recorded in a number of years.

Cast-iron pipe producers are still unable to report the placing of large contract requirements with Southern plants. The capacity in operation is practically the same as during the month of June; however, recently heavy forwardings have reduced unfilled orders very materially, and a significant portion of the present make, especially in the smaller sizes, is being stocked. In this connection it is interesting to note that a leading concern contemplates the changing of equipment so as to produce water pipe of the dimensions stipulated in the most important requirements of South America. Developments in this regard will be watched with much interest, as the change proposed would facilitate the bidding for a very attractive export tonnage that is now practically controlled by other producing centers. Quotations on water and gas pipe are nominally the same as at the time of last report, and are as follows per net ton f. o. b. cars here: Class "B,"

or water pipe, four-inch, \$22.50; six-inch and eight-inch, \$20.50; larger sizes, average \$20, with \$1 per ton extra for class "A," or gas pipe.

Quotations on 72-hour foundry coke have not fluctuated with the increase of the available coal tonnage, and prices on furnace coke have hardened since the production has been adjusted to the tonnage of the furnace requirement. Mine operations have necessarily been reduced to a certain extent with the smaller requirement for furnace operations, but local operators are now furnishing the larger portion of the coal required by railroads whose lines extend into the East than formerly, and the requirement for bunkering purposes at Southern ports and for export has steadily grown to such an extent that, notwithstanding the increased production, the reduction in the furnace requirement is not felt so keenly.

For Western North Carolina.

The Greater Western North Carolina Association of Asheville is endeavoring to locate a settlement of Florida people, a committee of whom have been investigating during the past week. This committee came from St. Petersburg accompanied by representatives of the Southern Railway from St. Petersburg and Jacksonville and Col. S. H. Cohen of Asheville, who went to Jacksonville to meet the committee. The visitors are now investigating available sites in the seven counties with which the association is concerned. This proposition resulted from the people of St. Petersburg planning to locate a summer colony at some convenient point, several sections being discussed. A summer homes colony company was then formed with a capitalization of \$50,000, and upon learning of the movement the Greater Western North Carolina Association corresponded with the promoters and induced them to visit the Asheville territory.

Big Florida Phosphate Purchase.

C. C. Memminger of Lakeland, Fla., general manager of the Coronet Phosphate Co., wires the MANUFACTURERS RECORD as follows:

"Plant and property of Compagnie Generale des Phosphates de la Floride at Pembroke, Fla., have been purchased by the Coronet Phosphate Co. of New York and Lakeland; possession taken on July 10; Pembroke plant thoroughly efficient and modernly equipped, with Diesel engines as prime movers. Property very valuable, containing large deposits of extremely high-grade land pebble phosphate; will be operated by Coronet Phosphate Co. under same management."

An unconfirmed dispatch states that \$1,250,000 was involved in this purchase.

A Mining Exhibit.

Plans are under way for an exhibit of mining machinery apparatus for rescue and first aid and safety appliances for mines in connection with the annual convention of the American Mining Congress, which is to be held at Philadelphia in the week of October 20. The United States Bureau of Mines, the State of Illinois and a number of big coal companies have already arranged for space. The president of the congress is David W. Branton, and its secretary is J. F. Callbreath, with headquarters at Denver.

Watt T. Brown, who has long been active in all movements for the development of Ragland, Ala., and its vicinity, is circulating an illustrated booklet telling of the industries already established there and the manufacturing and agricultural opportunities, together with the plans for business and industrial school for mountain boys.

Laying Out a Model Harbor.

COMPREHENSIVE AND MODERN PLAN BEING DEVELOPED AT ST. PETERSBURG, FLA.

By HENRY C. LONG of Boston.

St. Petersburg, Fla., is ambitious to be the winter capital of the tourist world. It is beautifully located on the peninsula separating the great Tampa Bay from the Gulf of Mexico, on the only portion of the United States that juts down from the continent into the tropics.

Its water front is a beach extending miles above and below the city. It has 17 miles of brick-paved streets that are kept as clean as streets can be; 100 miles of cement sidewalks, and every residence street is 100 feet wide and is a tropical park. Its proud inhabitants describe to you a city where the wrath of winter never comes, its average winter temperature being about 60 degrees; where heaven tempers the tropic sun with a constant cooling breeze from off the Gulf, its summer temperature averaging about 70 degrees; where severe storms are entirely unknown; where the roses bloom eternal; where the fields and woods are

most economical, most convenient and also the most beautiful harbor in the world."

The city adopted a plan, which the United States Government has approved, which will give them a wharfage of nearly $3\frac{1}{2}$ miles and utilize but 1800 feet of their magnificent water front in so doing. They have an entrance channel 500 feet wide and about 4000 feet long, which the Government will dredge for them at once to a depth of 12 feet.

Leading off from this channel are three slips of 200 feet each in width and one of 300 feet, and a large basin, large enough to hold and turn the largest vessel afloat. Projecting out between these slips at an angle of 45 degrees are five piers 1400 feet long, capable of handling an immense commerce. Two of 200 feet width, one of 250, one of 300, and one covering $16\frac{1}{2}$ acres designed for large cargoes and open-air storage, still having a strip of land

and serving every pier upon which the lead track of the municipal railway runs and between the ends of the slips, and that street is another space for factories and warehouses 200 feet in width, served by water in the rear and railroad in front.

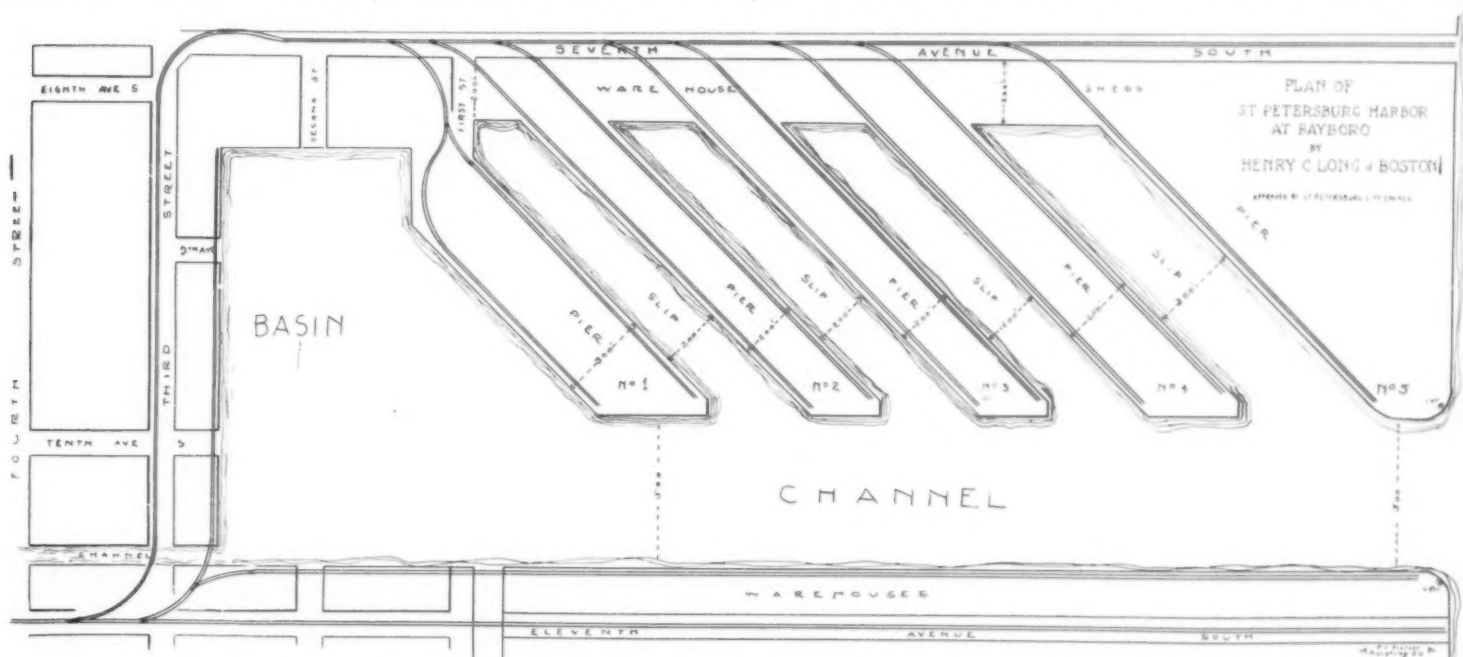
Also on the westerly end of the harbor is another space reserved for factories 150 feet in width, and served by the railroad on both sides. No more economical or attractive arrangement for factory location or warehouse location can be made—water front on one side, the railroad on both sides. Each pier is served on both sides by rail, so that transfer of freight direct from vessel to car and car to vessel can be made when desired. The piers will be so constructed that tracks down the center of the pier can be laid when needed.

At the present time such pier space as is needed will be made and the harbor will gradually be developed as needed, but the great thing about it is, they have the plan laid now, and not a line of it will be necessary to change; no matter how much the city grows nor how deep the channel is made, the surface will remain the same. When business justifies, great sheds will be built on these piers, with as

ornamented on each side with lofty concrete towers bearing figures and gigantic lights that will make it possible to enter the harbor at night and make an entrance as beautiful and charming as the Grand Canal at Venice. The pier heads will also be similarly ornamented. The length of the piers are such that a vessel of 700 feet in length can discharge its cargo at one end of the pier and as soon as discharged pull to the other end of the pier and reload, thus saving an immense amount of time and confusion and enabling business to be done in the most economical manner in the harbor.

This form of pier is not common in America, as the older cities in planning their harbors never dreamed of the giant vessels that now exist, but modern engineering everywhere is adopting the diagonal pier where it faces on channels, because of the much safer, easier and cheaper ingress and egress of vessels, and because by this method any vessel of any size can enter a harbor with a very narrow channel.

The great harbor that is planned for Osaka, Japan, although facing on a channel of 1800 feet, inclines its piers toward the channel at an angle of 50 degrees.



ever green, the odor of flowers is borne on every breeze throughout the year; where there is one unending round of seed time and harvest, making production as great as the workers wish to make it; where 'twixt the twilight and the dawn the birds sing as if it were not night; and, strange as it may seem, all these things are true.

The people are building for a great future, and they are realizing it as they go forward. Their improvements are laid out on as nearly an ideal basis as they can reach. They are jealous of their water front. It is great. It is a thing of wondrous beauty, and to the city a thing of wondrous value. They expect their city to become the Atlantic City of the South.

While they are looking for manufacturers of many kinds, for which they have excellent openings and offer excellent opportunities, they are planning for the greatest pleasure resort in the world; hence they are not devoting much of their space to a commercial harbor, but in this, as in other things, they are striving for the ideal. The only instructions for planning the harbor the Mayor gave me were: "Give us the greatest harbor you can in the smallest space, and make it so we can build it as we need it without changing the plan. We want the best planned,

next the bay as wide as the harbor commissioners desire, to be beautified and ornamented with tropical gardens, walks and whatever else they desire for beauty or enjoyment.

On the southerly side of the channel is a straight quay 4000 feet long, to be served by a municipally-owned and operated railway throughout its entire length, with a space of 150 feet for warehouses, factories, etc., throughout its entire length, and immediately behind the factories and warehouses a wide street through the center of which also a municipal railroad runs the entire length of the harbor, giving perfect railroad service in both front and rear and water service in front.

It was one of the Government requirements that equal access to every part of the harbor be given to each and every railroad that enters the city. In order to accomplish this a municipally-owned and operated railway will serve every part of the harbor and on equal terms to everybody. By virtue of the piers projecting at an angle of 45 degrees into the harbor, the railroads are enabled to pull full trains on and off the piers because of the great length of the curve, 500-foot radius, and length of the piers. To the northward of the ends of the piers is a wide street extending the whole length of the harbor

many stories as business will require, and it is the hope that since there will be but little transshipment probably from this point, the upper stories of the great pier sheds can be used for factories that will operate their machinery with electricity and assist in the support of the harbor by their rentals, and doubtless the roof will be used as a place of recreation.

A more ideal location for a cotton factory, shoe factory or any other kind of factory that does not require heat and fire could be found than here. Living is very cheap. Vegetables are grown in abundance all the year round. Summer clothing is all that is ever required; heat prostrations are entirely unknown. The cost of living is as low as anywhere else in America, and always will be. The employees of factories will find as good educational facilities as can be found anywhere. The public has provided already to supply their every want with every pleasure that the heart can wish, and almost free. They have hospitals, churches, parks and beaches, and they have already one of the finest and best appointed theaters in all the South.

Everywhere things are being made artistic, and the beautiful is put to the fore in all their public work. The entrance to the harbor, for instance, will be

The great harbor at Antwerp, recently planned by the best engineers of Europe, is planned as at Osaka. It is so with Rouen, France, and the great development at Galveston, although on a channel of 1600 feet its piers are inclined all the way from 37 degrees to 60 degrees, and the new harbor planned by Colonel Goethals at Panama, facing a channel of nearly 2000 feet, inclines the piers somewhere in the neighborhood of 70 degrees.

A little distant from the new harbor is another municipal enterprise, one of the most unique, beautiful and useful in the world for a resort city—a yachting harbor of 29 acres created for the purpose of affording an attractive and absolutely safe place for the anchorage of private yachts. It is open to everybody, and is so large that it can take care of an immense fleet. It will be surrounded by clubhouses, theaters, roof gardens, every form of dignified and refined amusement, and the whole set in one vast tropical garden. Nothing surpassing it in the world exists. It is being pushed rapidly to completion.

The city is rapidly realizing the dreams of its makers. It has reached a population of only about 8000, and yet its tourist population during the winter months is now three times that number. Some

beautiful hotels are now going up, but they need a number of them of the very highest grade.

It has just adopted a commission form of government to carry forward the work on all these great public matters in a

businesslike way. It is worthy of a visit by the people of America to catch the inspiration of the place and to see what really can be done in their own city by seeing what has been done and is doing in St. Petersburg.

Diversifying in Textiles.

ADVANCED POSITION OF A DOMINATING INDUSTRY AT GREENSBORO.

[Special Correspondence Manufacturers Record.]

Greensboro, N. C., July 7.

One of the most interesting manufacturing plants in this part of the South is that of the White Oak Cotton Mills, located in the outskirts of Greensboro and said to be the largest denim mill in the world. The interest attaching to it is not alone that it is the largest mill of its kind in existence, but because of the fact that it is one of the most perfectly equipped and arranged, and, further, because in its management and surroundings it is a model of its kind.

In 1896 or 1897 the Cone brothers, Moses and Caesar, built here what they called the Proximity Mill, which was the first mill in the South to make blue denims. It was successful from the beginning, and is still engaged exclusively in making the same class of goods it started on. So successful was it and so widespread the market for its product that in 1905 the owners built the White Oak Mill for the manufacture of denims exclusively, and it has been equally busy ever since the opening day.

The White Oak Mill occupies several buildings, the aggregate floor space of which is about 16 acres. The weaver room is 904x180 feet, containing in its one room almost four acres. In this mill are 60,000 spindles and 2000 looms. The mill gives employment to 1800 operatives. The buildings are so arranged that the cotton is received from the railroad cars and stored in warehouses at one end of the plant, from which it moves through picker building, carding and spinning departments, dyehouse, weaver room and finishing-rooms to be delivered in bales of denim to the cars at the other end of the plant. All this is done with the least possible amount of "lost motion," being one of the economies that have had much to do with the success of the mill.

White Oak village is one of the best built and most modern mill villages to be seen in the South. Everything about it belongs to the owners of the mill, and is controlled by them for the comfort, convenience and benefit of the operatives. The houses are well built and comfortable, lighted by electricity, and all of them have sufficient ground to furnish a garden plot to the occupier. There is plenty of good water, and sanitation is looked after by the company to the end that the carelessness of one shall not endanger the health of all. Good schools are maintained for the young of the village, and numerous churches have been built for the various denominations represented among the company's employees. The owners make it a point, indeed, to build a church for any denomination asking it which has any considerable numbers employed in the mill. For the purpose of encouraging thrift and neatness among their employees the mill owners offer each year a number of prizes to those making the best gardens and maintaining the neatest, cleanest premises. These prizes have caused the awakening of a considerable spirit of emulation among the various families, and the consequence is some excellent gardening and well-kept premises.

It is not altogether a spirit of altruism that moves the mill owners to do these various things to encourage thrift and better living conditions among their employees. It has come to be known of all students of industrial affairs that the best workmen are those of the highest intelligence; those who are most careful and most thrifty in their home life, and it is the settled policy among all employers who conduct their business along modern lines to fill their plants with such. The Cones were among the earliest of their class to recognize these economic facts, and no doubt it is to the putting them into effect that a large part of their success is due. A savings bank established in the village is patronized by a large number of operatives, some of whom have accounts of considerable size.

In 1900 the Sternberger brothers came to Greensboro from Ohio, S. C., and organized the Revolution Mills, in which they were joined by the Cones. These mills were equipped for making cotton flannels, of which they turn out a large and very attractive line. Latterly they have been turning out a line of piece-dyed solid-colored goods, for which they claim the highest degree of excellence in the matter of coloring. It is said that the dyeing is done by a process used exclusively in these mills, and that it is superior to that in use anywhere else.

This latter claim is of peculiar interest, in view of the fact that there are still some people in other cotton milling centers who aver that dyeing cannot be successfully done in the South. One of the attaches of the Cone mills, by the way, was telling me of the views one of these wise men of the North expressed to him a short time ago. He said he was in a cotton milling town in New England when he fell into conversation with a manufacturer who informed him that cotton could not be bleached in the South "because the South had no water fit for the purpose."

"He did not know I was working for a mill that had successfully bleached its own product for years, and I didn't tell him any better," said the gentleman who related the circumstance to me.

"It is a fact, is it not?" I asked, "that you can bleach cotton here just as well as they can in New England?"

For answer he went into another room and returned with a few samples of Greensboro-made goods, some of which were as perfectly white as any cotton goods or anything else I ever saw.

The Pomona Mills were organized by other interests and are engaged in making lines of goods different from those made by the Cone group. They, too, are thoroughly equipped with modern machinery and appliances and are conducted along modern lines. They are succeeding as Southern cotton mills are bound to succeed where managed with ability and enterprise. The Greensboro cotton mills employ an aggregate of between 4000 and 5000 people, and their combined payroll reaches many thousands of dollars monthly.

Greensboro is by no means a one-industry town. In fact, its manufacturing plants are numerous and varied in character. They embrace, besides cotton, those making furniture, office fixtures, lumber, machinery, stoves, flour, sewer and drain pipe, brick, buggies, metal culverts and numerous other articles. They number 75 and give employment to 5853 people.

Railroads radiating out in six directions give Greensboro excellent connections with many fields of raw materials and also with many markets for finished products. Good openings for other manufacturing plants exist here. It is suggested that these openings are especially inviting for plants making dairy products, knit goods, shoes, shirts, pants, overalls, cigars, fertilizers, brooms, harness, automobiles, trunks, mixed stock feed, as well as for additional cotton mills and furniture factories.

The Southern Power Co.'s lines carry electric current to Greensboro, and the company has erected here an auxiliary steam plant to supplement its hydro-electric current. Power for driving the wheels of manufacturing plants can be secured at attractive prices.

Four banks with ample capital and large lines of deposits furnish financial accommodation for all worthy enterprises. Three life and four fire insurance companies, with assets of \$7,147,504, have their home offices here, adding very considerably to the financial strength of the city.

The population within the city limits is 19,246, but this does not include the cotton-mill villages and the population living about other manufacturing plants located on the outskirts. Inside the corporate lines and in the closely-lying suburbs reached by electric railway lines it is estimated there are 30,000 people.

Greensboro has five schools of college grade, of which the State Normal and Industrial College and Greensboro College for Women stand at the head, with a combined enrollment approximating 1000. The public schools are of standard grade, thoroughly equipped and well managed, and there are numerous smaller private schools. The influence of its educational institutions is distinctly marked in the culture of Greensboro's citizenship.

The location is high; the surrounding country bears the rolling contour of the Piedmont plateau, and the physical attractions of the city as a place of residence are many and varied, fully supplementing its numerous advantages as a business location.

Guilford county, of which Greensboro is the legal seat, is one of the excellent agricultural counties of North Carolina. Its farmers raise enormous crops of corn, wheat, oats, hay, potatoes, apples and small fruits, and market each year hundreds of thousands of fowls and hundreds of thousands of dozens of eggs. The production of tobacco last year reached almost 3,000,000 pounds.

Famous old Guilford battleground, five miles northwest of the city, is a historic spot of great interest, where the general Government, the State and numerous private organizations have built enduring monuments to the Old North State heroes who there shed their blood that the American colonies might be free. The veneration with which this spot, consecrated by unsurpassed deeds of Revolutionary heroism, is regarded by its people lends a charm to Greensboro not surpassed by that with which it has been endowed by any phase of modern life or modern accomplishment.

Big Florida Drainage Project.

Referring to his company's development plans, Orrin Randolph, chief engineer, office at Lake Worth, Fla., writes to the MANUFACTURERS RECORD as follows:

"The Palm Beach Farms Co. has just let contract to A. B. Sanders, Miami, Fla., for a considerable amount of drainage reclamation work in Palm Beach county. One dredging machine will start work at once, and this machine is now on the ground. Other dredges will be put to work as soon as they can be shipped from the factory. The entire work outlined must be completed not later than January, 1916.

"A main outlet canal, about nine and one-half miles in length, is planned. It will have an average top and bottom width of about 50 feet and an average depth of about 11 feet. The total length of secondary canals will be about 24 miles, on all of which a dyke will be constructed to prevent overflow. Three canals connecting fresh-water lakes will be about four miles in length, and the total length of lateral canals will be about 36 miles. The average top and bottom width of lateral canals will be about 20 feet, with a depth of about 6 feet. The secondary canals will have an average depth of about 7 feet. The 24 miles of dyke work will have a height of 6 feet. The entire system as designed will protect from possible overflow from the Everglades an area of 110,000 to 115,000 acres. The actual amount of land which the system will drain in detail will be about 55,000 acres. The estimated yardage is 2,500,000, earth about 80 to 85 per cent., and rock from 15 to 20 per cent. The estimated cost of the work is from \$350,000 to \$400,000. This does not include construction expenditures for roads and a number of other development features which the Palm Beach Farms Co. has undertaken in the southern part of Florida."

Tennessee Manufacturers' Association

The headquarters of the Tennessee Manufacturers' Association were moved from Chattanooga to Memphis on July 1, and an active campaign has begun to double the membership of the association, which already includes a majority of the most prominent manufacturers of the State. The object of the organization is to promote acquaintance and be of mutual benefit; to secure, as a non-partisan body, the enactment of beneficial and just laws and oppose legislation inimical to the business interests of the State; to abate trade abuses and harmonize trade relations and extend the market of Tennessee manufactured products; to compile and distribute trade information, and to generally promote the interests of Tennessee manufacturers, which will as well benefit the State.

The officers of the association are: President, J. T. Willingham, Memphis; vice-president, T. F. Bonner, Nashville; vice-president, G. L. Hardwick, Cleveland; vice-president, S. B. Andersen, Memphis; treasurer, T. R. Winfield, Memphis; and secretary, Chas. C. Gilbert, Nashville.

The July number of "The Resources of Tennessee," published by the State Geological Survey at Nashville, contains special articles by State Geologist A. H. Purdue on the gullied lands of West Tennessee, by Assistant Geologist Wilbur A. Nelson; on mineral products along the Tennessee Central Railroad, by T. Poole Maynard; on the white rock phosphates of Deatur county, and by J. A. Switzer on the relation of water supply to health.

Durham's Unique Development.

THE INDUSTRY UPON WHICH GREAT NORTH CAROLINA ENTERPRISES HAVE FLOURISHED.

[Special Correspondence Manufacturers Record.]

Durham, N. C., July 18.

We are accustomed to think of smoke as one of the least substantial of substances. And so it is, but it served as the foundation upon which was built here a very substantial city. Durham is founded on smoke, has fed on smoke, and has greatly prospered on smoke.

During the Civil War, when Durham was so small as to be negligible by the census, John Ruffin Green, from six miles out in the country, began here the manufacture of smoking tobacco by beating up the leaves of the plant with ordinary flails—such as were formerly used for threshing grain—and sifting the broken particles by hand in ordinary sieves. The tobacco was of good grade, carefully handled, sun cured, and was given a delicate and grateful flavor by contact with the tonka bean, which grew wild all about.

thus until about 1870, when the business was sold to Julian S. Carr and others. J. R. Green, I think, was in bad health, and probably died about the time of the sale to Carr and his associates. At least he does not appear to have been prominently engaged in the tobacco business after that time.

About four miles from Durham at the beginning of the war lived a farmer named Washington Duke on a farm of some 300 acres. Washington Duke went into the Confederate navy at the beginning of hostilities, and when he came back after the declaration of peace he found that a fenceless farm and a cabin home constituted about all his earthly possessions with the exception of his family. It seems he had done something in the tobacco line before the war, and so in 1865 he, moved thereto, possibly, by the

an agreement was reached without much trouble. One of the conditions was that the two Duke concerns should consolidate, so that the new company would have the full benefit of the Duke name and the Duke experience. This was done, and the new company began business under the name W. Duke Sons & Co. With the new money thus secured, and with the genius for business that some, at least, of the members of this company afterwards displayed—combining under one organization and securing control of the lion's share of the tobacco business of the world—the manufacture and sale of the Duke tobaccos went up by leaps and bounds, and the business soon came to be of nation-wide significance.

Meantime Julian S. Carr and his associates had shown great ability also in pushing their business, and their brand was known and popular wherever pipes were alight. Most of the other manufacturers in Durham had been practically obscured by the operations of the two leaders or had dropped out altogether.

In 1890, using their Durham business as the nucleus, the Duke people formed

ately began to invest in other industrial enterprises in this and other North Carolina communities. In Durham he and his sons are running what is said to be the biggest hosiery mill in the world, and so successfully that they find themselves compelled to greatly increase its capacity in order to keep up with the demands for its output. General Carr is interested also in cotton-manufacturing enterprises in other places, in banking and farming. He takes great pride in Durham, and has been generous with his money when its expenditure meant the town's good. Among his other benefactions, and they are many, was the gift of the site upon which Trinity College is located. He makes his home in Durham, and is active and aggressive in the city's business life.

George W. Watts, who helped to organize the American Tobacco Co., after helping to build up the great business of W. Duke Sons & Co., and who was made many times a millionaire by his tobacco holdings, is also very active and very generous in his work for Durham. Most prominent of his works was the building and presenting to the city of the splendid



GROUP OF BUILDINGS OF THE WATTS HOSPITAL AT DURHAM, N. C.

When, in 1865, Gen. Joseph E. Johnston surrendered all that remained of his army to Gen. William T. Sherman, both the Confederate and Federal troops were disbanded a mile or two from Durham, and the men from the armies raided Mr. Green's place of business and took what tobacco was there. Soon afterwards letters began coming from the North and West asking where more of that excellent smoking tobacco might be obtained. Green's name was not known to the inquirers, as it did not appear on the packages, and the letters fell into the hands of an official, who for a time turned them over to Green. Finally, this official, seeing that Green was kept busy filling the orders thus received, made a combination with another man, and they for a while succeeded in selling a good deal of tobacco on orders that were intended for Green. But it was not long until the people sending in the orders learned the name of the manufacturer and sent the orders to him direct, and so the new concern went out of business.

Soon after the war Green sold an interest in his business to Blackwell & Day, and the firm became W. T. Blackwell & Co., successors to J. R. Green, manufacturers of smoking tobacco. It continued

success that seemed to be coming to Green, set up a plant for the manufacture of smoking tobacco in an old log barn that stood on his farm. He, too, used flails and hand sieves in the reduction of the leaf to smoking size.

Washington Duke had three sons—Brodie L., Benjamin N., and James B., better known as "Buck"—and these three boys in the beginning constituted his chief factory force. Later Brodie L. Duke went into business for himself, but "Ben" and "Buck," being considerably younger, stayed with their father.

The Duke and Blackwell enterprises prospered to such an extent that numerous other companies, firms and individuals went into the business, and a lot of brands—all having the name Durham concealed about them somewhere—were founded and put on the market. The business of the Dukes grew and expanded so rapidly that in the middle seventies they began to feel the need of more capital to enable them to take advantage of the opportunities it offered by putting in machinery, advertising and pushing sales, and when, in 1878, George W. Watts, a young Baltimorean, came down to Durham with some \$30,000 which he was willing to invest under certain conditions,

the American Tobacco Co., since known as the Tobacco Trust, under which name the great bulk of the tobacco business of the country was done until the recent dissolution of the concern under the direction of the Federal courts, the business of Carr and his associates having come into the American Tobacco Co. by way of the Continental Tobacco Co.

I think this is all I will have to say about tobacco in this article, further than to remark that since the court dissolution of the American Tobacco Co. one part of its business here passed into the hands of and is being operated by the Liggett & Meyers Company and the other is being operated by the American Tobacco Co. It is about some of the men who made their money here in tobacco and what they have done for Durham and North Carolina that I started out to tell.

Gen. Julian S. Carr, though he had built his business up to tremendous proportions by his ability in advertising and managing, seems to have sold out rather too soon, and probably did not receive nearly so much for his interests as he would have realized had he held on a little while longer. But, as it was, he received enough to put him in the millionaire class. This money he immedi-

Watts Hospital, a thoroughly modern and perfectly equipped institution that has but recently been completed and opened up for business. Some years ago Mr. Watts built and equipped a hospital and gave it to the city, but it proved far too small for the city's needs, and so he set to work to make a gift that would meet the requirements. For the purpose he secured a large tract of land just outside the city limits, occupying an eminence and bearing many beautiful trees, and here he erected three or four buildings of handsome architectural design, in which are combined divisions and conveniences that make them the last word in hospital construction. The equipments combine everything modern in the way of hospital appliances, and the entire institution is complete in every particular. In addition to the hospital itself, Mr. Watts built, in a convenient and desirable section of the city, a large and handsome apartment-house, which he presented to the city along with the hospital, the income to serve as an endowment for that institution's upkeep. The cost of the hospital and the apartment-house is placed at from \$500,000 to \$600,000. I would say the latter figure was nearer the correct one. The only conditions accompanying

this gift were that every reputable physician in the city should have equal use of it, and that nobody in need of its sheltering care should be denied it because of lack of money.

Washington Duke, founder of the tobacco family, was an ardent Methodist, and after he became well off in this world's goods was an extremely liberal giver to that church. Some years before his death he procured the removal of Trinity College, a school belonging to the church, from Trinity, in Randolph

pany has secured a number of water-power sites in the two Carolinas, principally in South Carolina, and has already developed more than 100,000 hydro-electric horse-power. This power, produced for the most part at Great Falls, Rocky Creek and Ninety-Nine Islands, in South Carolina, is transmitted over thousands of miles of wire and delivered to many mills and factories of various kinds. Among these are more than 150 cotton mills in the two States, cotton-oil mills, furniture factories, street-car lines, light-

undertaken to do and doubtless will accomplish.

It must not be thought that the growth and prosperity of Durham depend entirely upon the manufacture of tobacco. The fact is that the city has a very widely diversified line of industrial plants. It includes cotton mills, hosiery mills, and plants making saddles and harness, tobacco bags, fertilizers, medicines, clothing, flour, meal, overalls, brick, mattresses, barrels, hogsheds, wood novelties, machinery and foundry products and numerous other articles. Its manufactured output aggregates a value of something like \$23,000,000 annually. Durham has seven railroads, belonging to five different companies, and its transportation facilities are not the least of its many attractions to business men and manufacturers. Its banks are strong and are managed with the greatest degree of liberality consistent with safety. In population it has had rapid growth in the past few years. In 1869 it had 200 people, in 1880 it had 2041, in 1890 it had 5485, in 1900 it had 6679, and in 1910 the census showed 18,241. It is estimated that it has now, including East and West Durham, two close-lying suburbs, some 30,000.

It has an excellent laboring class, most of whose members own their homes, and are of the highest type of intelligent, dependable working people. A city of schools and churches, of excellent social environment and conditions of living that render it unusually attractive to the man who is looking for the best place in which to make a living and raise a family.

GEO. BYRNE.

Methods of Shipping Cement.

Mr. Wm. G. Hartranft, president of the Wm. G. Hartranft Cement Co., Philadelphia, selling agent of the Old Dominion cement of Virginia, in a letter to the MANUFACTURERS RECORD referring to the contract made for the sale of about 500,000 barrels of cement to the Hardaway Contracting Co., recently reported, makes some comments as to the possibilities of shipping cement in bulk. Mr. Hartranft claims that cement ought not to be shipped via water when it could go by rail. He writes as follows:

"At the present time we do not think many of the factories are equipped to ship in bulk. There are some advantages shipping in bulk, but there are also very many decided disadvantages.

"The engineer, who is always skeptical, cannot keep track of the amount of cement going into the mix by any other method as easy as he can by the number of bags.

"Twenty years ago two of the companies in Pennsylvania had stockhouses built two stories high, and the cement was spouted from the second story into the cars, but this method of shipping cement never was in favor, except at points where it was shipped direct to a warehouse and put up in packages upon its arrival.

"For example, years ago in New York city there was a great deal of foreign cement shipped in barrels. After the barrels were emptied they could be bought very cheap, I believe two or three cents apiece, and most all of the cement shipped in bulk to Jersey City was packed in these old foreign barrels, thereby saving the cost of buying new barrels from the cement company. To the credit of the foreign factories, these second-hand barrels were better than the new barrels put out by the American mills.

"There might be some advantage to the people in the South if cement was shipped in bulk, because that would require shipments direct from the mill in cars rather than by being shipped from Jersey City

in schooners and unloaded and stored for more or less longer period of time on the wharves at the Southeastern seaports. Cement stored in this manner absorbs considerable moisture, and, to say the least, the quality is not improved. This could be overcome by the consumer insisting on cement coming direct from the factory rather than from a seaport where no cement is made."

McDONALD CHARCOAL IRON CO.

Plans for 100-Ton Iron Furnace and By-Product Plant for Hardwood Charcoal.

The McDonald Charcoal Iron Co. of Ellsinore, Mo., recently mentioned in the MANUFACTURERS RECORD, will build a 100-ton daily capacity charcoal furnace and American Grondal style of by-product plant; complete plant and equipment to cost \$400,000; L. W. Searles, Woodward Building, Birmingham, Ala., is the consulting engineer, and in a letter to the MANUFACTURERS RECORD says:

"The work will include chemical, mining and concentrating plants, dwellings for operatives and local officials. Reports show ample timber and brown ore to maintain such a plant for a liberal term of years. The plant is to be the most modern in construction, with all proven labor-saving features. The ores available are brown ores low in phosphorus, above 50 per cent. metallic iron and from 1 to 2.50 per cent. of manganese; suitable for the best grade of Southern charcoal iron. The hardwood timber is mostly oak, and of the varieties that should make the best grade of charcoal. Plans are now being prepared in my office, and construction work will be begun in August."

Mr. J. H. McDonald, the president, in furnishing some additional particulars, writes:

"Company will not incorporate until after plant is completed. Money provided by Northern and Eastern men. Plant of concrete, structural iron, boiler plate, firebrick and latest improved machinery. Charcoal furnished by chemical or by-product plant to meet all requirements and deliver charcoal direct into furnace free of all moisture. Concentrating plant, 400 tons daily capacity, will take ore direct from mines to ore bins. Company has between 8000 and 9000 acres of rich producing ore land of secondary limonite lower in silica and phosphorus than Alabama ores and averages higher in metallic iron. Some of the mines are in close proximity to furnace, while others are 15 to 20 miles either way on Frisco Railroad. Several hundred acres of best ore-producing land adjoins furnace, and mines are not over 1000 feet from it. Ore can be trammed to concentrator and not loaded on railroad until in manufactured state. We are now on Mingo-Hunter division of Frisco, but about eight miles northeast, and through a valley we intersect with Iron Mountain Railroad, and if that company does not build track before completion of plant the furnace company will build their own track. The company has to build two and one-half miles down valley to bring in limestone used in fluxing. About one and one-half miles east of Ellsinore company has 500 acres on which to locate plant and offices. The balance they are to plat into town lots, and other manufacturing plants will be welcomed to our new town, which will be known as Steel City. Water-works and electric-light plant will be established at once, and after that the people of the town can perfect their own organization."

The Chamber of Commerce of Birmingham, Ala., has begun the publication of "The Birminghamer," under the direction of its publicity committee.



ONE OF THE MAIN BUILDINGS TRINITY COLLEGE, SHOWING MONUMENT TO WASHINGTON DUKE.

county, to Durham, and until the time of his death, a few years ago, gave largely to its support. As noted above, Gen. Julian S. Carr gave the land, a beautiful site in the outskirts of the city, for the college grounds. Since their father's death B. N. and J. B. Duke have contributed large sums to the building fund and running expenses of the college, their gifts during the past few months being said to aggregate \$1,500,000. Altogether they are reputed to have given the school \$2,000,000. Handsome buildings have

ing systems—all the various power-using plants and concerns known to modern life. An interurban electric line from Durham to Atlanta, a distance of approximately 250 miles, is one of the Duke enterprises now in contemplation. A portion of the line has, indeed, been built and put into operation between Charlotte and Gastonia, while local lines here and there have been secured and will be finally worked into the general system.

It is said that J. B. Duke has organized this great power company with the



A DORMITORY AT TRINITY COLLEGE.

been erected for lecture halls and dormitories, and the equipment is thorough in every respect. These sons have also erected a beautiful church in memory of their father, and are constant and liberal contributors to its support. They are interested in the banking business here and in numerous other enterprises of more or less importance.

But by far the largest and most far-reaching enterprise in which any of the North Carolina tobacco millionaires have put their money is that of the Southern Power Co., of which J. B. Duke is the organizer and the president. That com-

express determination to give his native State the opportunity for high development along manufacturing lines, and that he even stands ready to aid worthy enterprises financially, to the extent of \$50,000,000, rather than see any halt in the progress which he thinks should be made. It seems to be his ambition to do more for North Carolina than any other one man has ever done for any other State. A wonderful ambition truly, and a wonderful thing that a man can progress so far from humble beginnings as to be able to do what Mr. Duke has



TIMBER CREOSOTING PLANT OF THE LOUISVILLE & NASHVILLE RAILROAD CO. AT WEST PASCAGOULA, MISS.

Mississippi's Paper Mill.

[Special Cor. Manufacturers Record.]

Pascagoula, Miss., July 14.

In the laboratory of the plant of the Southern Paper Co. at Laine, Miss., on Saturday, pulp for paper was made from the sisal plant, specimens of which had been brought to the plant to be tested from Yucatan by George Taylor of Providence, R. I. A. W. Waern of Sweden, one of the inventors of the process employed at the paper mills, pronounced the product all right, and said that it makes good pulp.

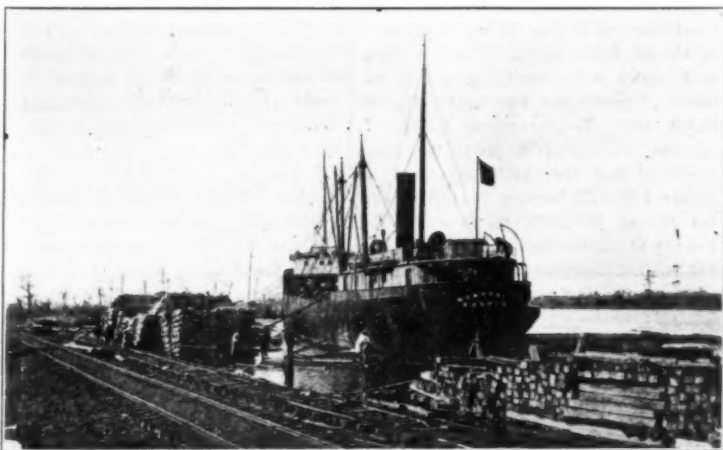
Mr. Waern, referring to the making of paper from pine pulp, which requires four hours' time from the arrival of a log of wood at the mill, says that a cord of wood would average a yield of 1000 pounds of pulp or paper. At present the plant is not utilizing such by-products as wood alcohol, tar, turpentine, etc., but it is announced that a plant for their recovery will be erected at some time in the future. Mr. Waern states that the paper turned out by this mill sells for \$80 a ton, and hence a cord of wood yields \$40 gross, not including the by-products. Thomas P. Hale, formerly vice-president of the Gulf & Ship Island Railroad, upon being made acquainted with these facts, said: "This is the biggest thing in the State of Mississippi, if it is not the biggest thing in the Southern States."

The Concrete House and Its Construction.

By Maurice M. Sloan, architect and engineer. Published by the Association of American Portland Cement Manufacturers, Philadelphia, Pa. Cloth-bound, 224 pages. Price \$1.

As the demand for fire-resisting, durable and sanitary construction has been the dominant note in most that has been said and written on the subject of architecture

during the last decade, the purpose of this book is to make clear the advantages and low ultimate cost of concrete in the construction of buildings. It forms a practical working volume containing important details involved in the construction of concrete dwellings, so that an architect with its aid may proceed to design them. Each chapter has been subjected to the careful scrutiny of experts on concrete. Whether the architect be called upon to build a house of reinforced concrete throughout or a house with the concrete construction confined to the walls, he will find in the book the essential details. The chapters on floors, roofs and interior construction will enable him to remodel and make fireproof and sanitary a house of brick or stone. Working drawings, tables and examples relating to the various features of concrete construction as applied to dwellings accompany the text. In drawing up specifications for the construction of a concrete house the architect not familiar with the details of concrete construction will find the book valuable. It covers the subjects of mixing and placing concrete, the casting of beams and girders, floor and roof construction and treatment of surfaces. The book is handsomely illustrated with full page pictures of notable concrete houses, a majority of them relating to the text. The illustrations include both exterior and interior views. In the preparation of the book the dominant purpose has been to give to architects an accurate and comprehensive treatise that would receive recognition as a standard work and to interest them in concrete construction. Members of the profession will be presented with complimentary copies upon receipt of 14 cents postage by addressing the Association of American Portland Cement Manufacturers, Land Title Building, Philadelphia, Pa.



LOADING CROSSTIES AT MOSS POINT, MISS.

GOOD ROADS

WEEK'S HIGHWAY RECORD.

Progress in Southern Road and Street Improvement.

[Further details of highway undertakings and bond issues mentioned below are given under the headings Construction Department and New Securities, published elsewhere in this issue.]

Bonds Voted.

Castlewood, Va.—Russell county voted \$150,000 bonds for road construction.

Conroe, Tex.—Montgomery county voted \$250,000 bonds for roads in district No. 2.

Mooresville, N. C.—Town voted \$65,000 bonds for street improvement, etc.

Spartanburg, S. C.—City voted \$100,000 bonds for street paving and sidewalks.

Edneyville, N. C.—Edneyville township voted \$12,000 bonds for road construction.

Tyler, Tex.—City voted \$300,000 bonds for constructing roads.

Warwood, W. Va.—City voted \$2000 bonds for street improvements.

Waxahachie, Tex.—City voted \$35,000 bonds for street paving, etc.

Bonds to Be Voted.

Alexandria, La.—City votes August 19 on \$40,000 bonds for paving, etc.

Florence, S. C.—Florence county votes August 5 on \$500,000 bonds for road construction.

Fort Myers, Fla.—Lee county will vote on \$200,000 bonds for road construction.

Rockport, Tex.—City will vote on \$155,000 bonds to construct road and causeway across Capano Bay.

Contracts Awarded.

Baltimore, Md.—Board of Awards awarded \$73,800 contract for street paving.

Anniston, Ala.—Calhoun county awarded \$4000 road construction contract.

Hattiesburg, Miss.—Forrest county awarded \$54,815 contract for about 16 miles of roads.

Hopkinsville, Ky.—City awarded contract for 8000 square yards street pavement.

Jacksonville, Fla.—City awarded \$65,115 contracts for street improvements.

Portsmouth, Va.—Seaboard Air Line Railway awarded contract for paving; \$20,000 available.

Sarasota, Fla.—City awarded \$40,000 paving contract.

Contracts to Be Awarded.

Anderson, S. C.—City receives bids until July 30 for 100,000 square yards of street paving.

Arcadia, Fla.—De Soto County has preliminary estimates for about 230 miles of road construction to cost (with engineering, etc.) about \$570,000.

Baltimore, Md.—State receives bids until July 22 for building 8.87 miles of State highway.

Chattanooga, Tenn.—Hamilton county will construct Lookout Mountain road; \$65,000 available.

Greenwood, Miss.—Leflore county opens bids August 4 to build 25 miles of road.

Helena, Ark.—N. A. Bowman of Little Rock, Ark., is chairman of road committee having \$40,000 available for asphalt paving in new district.

Magnolia, Miss.—Covington county receives bids until August 4 to improve about 37 miles of road.

Montgomery, Ala.—Montgomery county receives bids until August 11 to gravel about four miles of road.

Opelika, Ala.—City receives bids until

July 28 for 62,000 yards street paving.

Paragould, Ark.—Green county has \$80,000 available to construct 20-mile road.

Richmond, Va.—Henrico county receives bids until July 22 to construct about eight miles of roads.

Staunton, Va.—Augusta county receives bids until July 24 to construct five miles of macadam road.

For a Concrete Highway.

Commercial organizations of Chattanooga, Knoxville, Athens and other East Tennessee communities are promoting the building of a concrete highway 120 miles in length from Chattanooga to Knoxville, and a temporary organization has been formed with S. H. Thompson of Athens, president; J. Wylie Brownlee of Knoxville, vice-president, and V. L. Robinson of Chattanooga, secretary and treasurer. The proposed concrete highway will form an important link in the highway system of the State and of the South, including the Memphis-to-Bristol highway, the State highway through Virginia to Washington and the road from Chattanooga to Atlanta and Florida points.

Road Bonds for \$10,857,000.

Comptroller Lane of Texas has issued a report stating that since the enactment of the Texas road and bridge bond law of 1909 his State has issued a total of \$10,857,000 for road construction, besides \$1,548,944 for bridge construction. This report is ample evidence of the activity of Texas in the establishment of modern road systems, many of which have been detailed in the MANUFACTURERS RECORD.

MAKING PHOSPHATE SOLUBLE.

Discussion of the Elimination of Sulphuric Acid.

Referring to the news in the MANUFACTURERS RECORD on July 10 as to the elimination of the use of sulphuric acid in the manufacture of commercial phosphate for fertilizer, Charles Catlett, chemist and geologist of Staunton, Va., writes:

"It announces much sooner than I had anticipated the plans for rendering the phosphate soluble by treatment other than with sulphuric acid. The principle has been well known, and 15 years ago I advocated experiments along the line of manufacturing what was a basic phosphatic slag by using a blast furnace for the purpose and by using the low-grade phosphates which were useless for the sulphuric acid method. There have been very extensive experiments conducted for a long time by which the phosphates were heated in a rotary furnace like a cement kiln with material which at that high temperature converted the phosphates into soluble form, and most satisfactory results have been gotten in preliminary work. But usually such developments are exceedingly slow. More than that, the owner of the special or peculiar patent is unwilling to let others use it, and it will be a long time, I think, before the acid method is completely abandoned. When it is, the manufacturer of sulphuric acid will turn in other directions for its use. Sulphuric acid may be said to be at the base of chemical industrial development, and while individuals may be hurt, the country as a whole is never hurt by sound and successful improvements."

For Scandinavian Trade.

Scandinavian-American Export-Import Co., 141 W. 36th street, New York, writes to the MANUFACTURERS RECORD as follows:

"Desire to get in touch with manufacturers of goods fit for export for Scandinavian countries."

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

FOR EAST AND WEST ROAD.

W. J. Oliver of Knoxville Busy on Plan for Important Through Route.

Wm. J. Oliver of Knoxville, Tenn., according to a report from there, has taken steps to interest English capitalists in his plan to connect the Tennessee Central Railroad and the Knoxville, Sevierville & Eastern Railroad and build extensions thereto which will result in making a through line from Hopkinsville, Ky., which is on the Illinois Central and the Louisville & Nashville railroads to Greenville, S. C., which is on the Southern Railway and the Atlantic Coast Line, and thus form a new route between tidewater on the Atlantic seaboard and the West.

The Knoxville Board of Commerce has approved, at his suggestion, a proposition that Knox county be empowered to issue \$500,000 of bonds to aid in the projected railroad construction. It is further said he has received assurances that Davidson county will vote \$1,000,000. To connect the two roads mentioned would require about 55 miles of new line from Knoxville to Harriman, Tenn., and to build from Sevierville to reach a connection with the Greenville & Knoxville Railway east of the Blue Ridge would demand approximately 100 miles of construction; in fact, a detailed survey only would determine how much would have to be built there on account of the mountainous country to be traversed. The Tennessee Central extends from Hopkinsville via Nashville to Harriman, 251 miles, and the Knoxville, Sevierville & Eastern, which was built by Mr. Oliver, runs from Knoxville to Sevierville, Tenn., 30 miles. The Greenville & Knoxville line, now 23 miles long from Greenville to River Falls, S. C., has begun construction of an extension of about 30 miles to Brevard, N. C. The Tennessee Central is in hands of receivers. To obtain the bond issues desired will require, it is understood, action by the Tennessee Legislature authorizing the counties to make the loans.

On his return from New York to Knoxville the other day Mr. Oliver was accompanied by R. B. Jones, who was said to represent Eastern capitalists. Mr. Oliver, however, declined to talk about it. In addition to a British syndicate, it is reported that New Jersey and New York moneyed men will go into the enterprise.

BALTIMORE & OHIO'S YEAR.

\$101,541,905 Announced as the Gross Earnings, a Gain of Nearly \$9,000,000.

The Baltimore & Ohio Railroad is now in the hundred-million class. Its preliminary statement for the fiscal year ended June 30 has been issued, showing results with a large margin above the mark, which, according to anticipations for some months, was exceeded for the first time in the history of the road. There are only four other systems which have annual revenues exceeding \$100,000,000. The figures for June are partially estimated, and are not to be accepted as exact, although any error therein could not be sufficient to exhibit a fall below that mark. The statement is thus:

Total operating revenues \$101,541,905, increase as compared with the last fiscal year \$8,947,582; operating expenses \$73,790,492, increase \$9,080,954; net operating revenue \$27,751,413, decrease \$133,372; total net revenue after allowing for

outside operations \$26,899,193, decrease \$318,952; operating income after taxes \$23,936,263, decrease \$498,687; other income \$5,128,935, increase \$786,043; gross corporate income \$29,065,198, increase \$287,356; net income after deductions, interest, etc., \$13,201,130, decrease \$740,264.

After the payment of the regular dividends which have been declared, there will be a surplus of about \$1,600,000 to be carried to the credit of profit and loss, or about \$600,000 less than last year, which is largely accounted for in revenue losses occasioned by the floods in Ohio during this spring. The company has continued its maintenance program, providing for large expenditures, these being very close to 32 per cent. of the gross revenues, or about \$4,000,000 more than was spent for the same purpose during the previous year.

New Equipment.

Southern Railway has ordered 10 Pacific and 15 Mikado locomotives from the Baldwin Locomotive Works, Philadelphia. The same builder also has orders for 3 locomotives for the Virginia & Southwestern Railway and 1 10-wheel locomotive for the Tremont & Gulf Railroad.

A. W. Thornley, 419 First National Bank Building, Chickasha, Okla., would like to obtain information about up-to-date equipment for an electric railway. Some gasoline motor cars may be wanted. Address "Interurban Company" as above.

Charleston Interurban Railway Co., Charleston, W. Va., says a report, has ordered 2 cars, each 35 feet long, from the Jewett Car Co., Newark, O.

Seaboard Air Line, says a market report, has ordered 5 dining cars from the Pullman Company, Chicago, and 10 passenger cars from the Pressed Steel Car Co., Pittsburgh.

El Paso & Southwestern Railway is reported to have ordered 5 Mikado locomotives, with superheaters, from the American Locomotive Co., New York; also 500 automobile cars, 200 stock cars and 200 gondola cars from the Standard Steel Car Co., Pittsburgh.

Clarksburg & Western Electric Railway (Monongahela Valley Traction Co.), says a report from Weston, W. Va., has purchased 4 high-speed passenger cars.

Maryville-Knoxville Interurban.

The Maryville-Knoxville Interurban Railway Co., capital \$10,000, which proposes to build a line 14 miles long from Maryville to Knoxville, Tenn., via Rockford, Little River and Vestal, will begin preliminary survey July 21, and a report from Knoxville says that G. W. Pearsall is locating engineer. There will be a bridge about 150 feet long, and others from 40 to 50 feet long. Route is through rolling country, and connection will be made with the line of the Knoxville Traction Co. Morton Butler of Chicago has been elected president of the company; John F. Shea of Knoxville, vice-president; Knox Burger, treasurer, and John M. Clark, secretary, both of Maryville, others interested including J. Park Vestal of Knoxville and H. G. Tarvian of Maryville, Tenn. Knox county has granted a franchise of 30 years for the road.

Seaboard Air Line Report.

The Seaboard Air Line's report for May, 1913, and for the 11 months ended May 31 has been issued. Estimates for June indicate that the gross earnings for the full fiscal year ended June 30 will be about \$24,444,000.

The figures for May are: Gross earnings \$2,076,750.24, increase as compared with the same month of last year \$133,-

624.43; operating expenses \$1,359,890.96, decrease \$27,340.48; net earnings \$716,850.28, increase \$160,964.91; operating income after taxes \$639,850.28, increase \$163,964.91; gross income \$652,157.36, increase \$169,067.79; surplus after interest (including \$104,166.67 interest on adjustment 5s) \$203,884.20, increase \$148,843.22.

The statement for the 11 months shows: Gross earnings \$22,587,206.33, increase \$1,388,731.32; operating expenses \$15,443,394.44, increase \$457,225.32; net earnings \$7,143,811.89, increase \$931,560; operating income after taxes \$6,264,911.89, increase \$889,560; gross income \$6,449,390.66, increase \$927,016.43; surplus after interest (including \$1,145,833.33 interest on adjustment 5s) \$1,545,249.01, increase \$705,875.26.

Louisville & Nashville's New Road.

The Louisville & Nashville Railroad, according to a report from Birmingham, Ala., is putting in use various sections of its new double-track road between that city and Nashville, Tenn., as rapidly as they are completed. There is now a stretch of this road in operation between Blount Springs and Decatur, and construction upon the remainder is being pushed. The concrete bridge over the Warrior River is finished. It will carry two tracks. The large 90-foot cut at Holmes Gap will soon be done, and the line through the cut at Cullman is being used. Considerable work is yet to be finished on the two tunnels at Blount Springs, otherwise it is said the whole road might be put in operation this fall. One of them is 2200 feet and the other about 1100 feet long. Within two or three weeks it is expected that work in the Birmingham yards between 14th and 20th streets will be completed.

Projected Electric Road.

A. W. Thornley, Chickasha, Okla., says he is interested in the promotion of a prospective electric railway which will connect two towns 50 miles apart, and he would like to obtain as much information as possible regarding up-to-date equipment, etc. It is presumed that the company will want to use some gasoline motor cars. The country is practically level for the whole distance. He would also like to get in touch with someone who could make an approximate estimate of the cost of construction. A charter will be obtained as soon as a preliminary survey is made, which will be within the next 30 days. Fort Worth and Dallas (Texas) parties are interested. For the present mail should be addressed to the "Interurban Company," 419 First National Bank Building, Chickasha, Okla.

Frisco's Earnings Increase.

An encouraging statement of earnings for May and also for the 11 months of its fiscal year ended May 31 has been issued by the St. Louis & San Francisco Railroad, which was recently placed in the hands of receivers. The figures for the month are: Total revenues \$3,698,107, increase as compared with the same month of last year \$319,639; operating income \$734,177, increase \$111,575; total net income \$841,311, increase \$77,581. For the 11 months the total revenues were \$42,343,320, increase as compared with the corresponding period of last year \$3,629,958; operating income \$12,037,160, increase \$1,439,498; total net income \$12,876,332, increase \$1,713,550.

West Penn Traction Report.

The statement of the West Penn Traction & Power Co. for the year ended May 31, 1913, shows gross earnings, \$4,056,-

802; operating expenses and taxes, \$2,258,471; net earnings, \$1,798,331; balance after fixed charges, \$791,257; surplus after guaranteed dividends, \$556,257. Last year gross was \$2,583,605 and net \$1,264,628, while surplus was \$423,113. It is explained that the increase of \$400,000 in fixed charges shown in this year's report to more than \$1,000,000 is due to much construction work during the year, from which the revenue to date has been necessarily small.

Southern Railway Sells Bonds.

A report from New York says that the Southern Railway Co. has sold to J. P. Morgan & Co. \$1,500,000 of its first consolidated 5 per cent. bonds due in 1994, and that firm has resold them to Kean, Taylor & Co. It is stated that these bonds were free in the company's treasury, being part of an issue of \$120,000,000 authorized, of which \$61,757,800 are outstanding, including \$1,114,800 still held in the treasury. The rest of the bonds are reserved for refunding. The proceeds of the sale, it is said, will be used to reimburse the treasury for sums already expended for improvements, betterments, etc.

Pawhuska to Bartlesville and Ponca.

The Pawhuska & Northeastern Railway Co., capital \$100,000, has been chartered in Oklahoma to build a line about 20 miles long from Pawhuska to Bartlesville; also another line about 50 miles long from Pawhuska to Ponca City. Extensions are contemplated which will make, it is estimated, about 200 miles of track altogether at a cost of about \$10,000 per mile. It is not announced when construction will begin, but it is expected to start soon. The incorporators are W. C. Tucker, J. B. Toison, W. T. Leahy, Charles F. Stuart, E. J. McCurdy, W. C. Owen, L. F. Roberts, A. W. Hurley and H. H. Brenner, all of Pawhuska.

Oakwood & Trinity River Southern.

The Oakwood & Trinity River Southern Railway Co., capital stock \$100,000, has been chartered in Texas to build a line from a connection with the International & Great Northern Railroad in Leon county to a point in Madison county, also not yet determined, a total distance of about 50 miles. Headquarters will be at Oakwood, Tex. The incorporators are J. M. Dobie, J. L. Hill, William A. Frisby, J. H. Haile, W. W. Collier and Lee Frisby, all of San Antonio; J. W. Barton, John A. Childress, Lee Knowles, all of Oakwood, and F. S. Streater of Dallas.

Trackless Trolley Plans.

A report from Bristol, Tenn., says that J. G. Rossman of New York, an engineer representing Henry L. Doherty & Co. of 60 Wall street, is there investigating with reference to the establishment of a trackless trolley system on turnpike roads in Sullivan county. The cars of this system carry, it is said, from 25 to 40 passengers, according to the sizes of vehicles used. It is claimed that they have broad tires which would benefit rather than harm the roads.

South Carolina Western Extension.

The South Carolina Western Extension Railway Co. has been incorporated in South Carolina to build a line about 32 miles long from Florence southeast to a connection with the Georgetown & Western Railway in Pee Dee township; capital stock \$16,000 minimum to \$625,000 maximum; headquarters at Florence; incorporators, George E. Dargan and D. T. McKeithan, both of Darlington, S. C., and James D. Evans of Florence, S. C.

According to a recent report from Flor-

ence, construction is already in progress on this extension, which will be from Florence to Poston, S. C. W. R. Bonsal, Hamlet, N. C., is president of the South Carolina Western, from McBee to Florence.

The Seaboard Air Line announces the opening of the recent extension of the South Carolina Western Railway from Lydia to Timmonsville, S. C., 17 miles. The intervening stops are Oats, which is three miles, and Lamar, nine miles, from Lydia, which is on the Sumter division, seven miles from Hartsville.

MINING

POTASH FROM FELDSPAR?

Important Mineral Development Now Under Way in Maryland.

A development which it is thought may have an important bearing on the production of potash is being made at the feldspar quarry and mill near Laurel, Md., of the Earth Products Co. of Baltimore. The quarry at present produces feldspar, scrap mica, kaolin and china clay. The mill just completed is turning out ground feldspar for roofing, for use in pottery work, enameling processes, facing concrete, for abrasive soaps, cleansers and other purposes. While carrying on the work of grinding feldspar, mica and kaolin, the company is making experimental tests for the extraction of potash, which is found in considerable quantity in this feldspar. It is stated that the United States Department of Agriculture has analyzed the feldspar and reported it as containing from 10.3 to 12 per cent. potash. An analysis made by G. W. Lehmann & Son, Baltimore, showed potash, 12.3 per cent.; silica, 59.2 per cent.; iron oxide, .004 per cent.; aluminum, 26.3 per cent.; lime, 1.07 per cent.; magnesium, .23 per cent., and soda, 1.18 per cent. Experimental work in testing the feldspar with a view to producing potash is being carried on by the Bureau of Soils of the Department of Agriculture under the supervision of John D. Cameron.

The mica now being mined is suitable for grinding into lubricants, also for mixing with other lubricants, for decorative work, wallpaper making, and as a substitute for soapstone between the inner tube and rim of automobile tires. The kaolin and china clay are reported as of proper quality and in sufficient quantity to supply the requirements of Trenton and other potteries.

The new mill is located at the quarry four miles from Laurel, Md., on the Little Patuxent River. The installation of machinery and the construction of the mill throughout has been done by the Hartz Machinery Co. of Philadelphia. The elevator section of the mill is five stories high, and all the processes of grinding, sizing and pulverizing to the finest mesh are carried on in regular order.

Hauling to the Baltimore & Ohio Railroad at Laurel is at present by contract with horse-drawn drays, but plans are being made to try out delivery by motor trucks. A railroad is also planned by Mr. Hopkins of Highlands, Md., who has the right of way for a large part of the distance from Laurel to his lime quarries and farms some distance beyond the feldspar quarry. This railroad, if built, would provide means of getting the products of these two industries to Laurel.

The officers of the Earth Products Co. are W. R. Bartgis, president; F. W. Day, vice-president; A. H. Herbst, secretary and treasurer; H. W. Meier and Dr. Rozel Berryman, directors, with A. J. Redpar, superintendent, all of Baltimore.

West Virginia Coal.

West Virginia produced 66,786,687 short tons of coal, valued at \$62,792,234, in 1912, according to Edward Wheeler Parker of the United States Geological Survey. The output was 6,955,107 tons greater than in 1911, in spite of a decline of more than 898,000 tons in the two counties affected by the Paint and Cabin Creek strike. For the past four years West Virginia has held second place among the States in coal production as to quantity, but third as to value. Bearing upon that, and upon the fact that the average of thermal efficiency of West Virginia coal is higher than that of Illinois, though the average price of Illinois coal is higher than that of West Virginia, Mr. Parker says:

"It is true that conditions in West Virginia are favorable to low mining cost, and that West Virginia coal can be sold at a lower rate per ton than the coal in the States with which its product comes into competition, but it is also true that West Virginia lacks an advantage which the others possess, in that she has no manufacturing industries to consume the product. Fully 80 per cent. of the coal mined in West Virginia is shipped to distant markets, part of the product actually crossing other producing coal fields before reaching its points of destination. More West Virginia coal was made into coke at plants in other States than at ovens in West Virginia."

Conserving Louisiana Natural Gas.

Two wild wells in the Caddo gas and oil field in Louisiana are wasting daily 13,000,000 cubic feet of natural gas. To check this waste, which threatens to exhaust the field within a few years, progressive citizens of Shreveport and vicinity are co-operating with the Conservation Commission of Louisiana. At a recent meeting in the Caddo parish courthouse it was shown that under regulations adopted several months ago for the handling of natural gas in the field a daily saving of nearly 13,000,000 feet has been effected, and it is calculated that the waste from the wild wells may be brought to an end at a cost of between \$50,000 and \$75,000. The co-operative efforts are being directed toward securing that fund.

Mining Virginia Silica.

The Virginia Silica Rock & Sand Corporation, general office at Falls Mill, Va., has been organized with a capital stock of \$50,000 and the following officers: President, J. H. Wingate of Roanoke, Va.; vice-president, Lee J. Barbee of Graham, Va.; secretary-treasurer, Warren W. Cline; manager, Walton Suddith; both of Falls Mill. This company has leased and will develop the Catawba silica mines at Sandberg, Va. It is installing machinery for a dry process, with daily capacity of 400 tons, which will increase the plant to 500 tons. The Norfolk & Western Railway has awarded to the company a contract to furnish daily 300 tons of sand for locomotive and foundry uses.

Maryland Coal in 1912.

In 1912 Maryland produced 4,964,088 short tons of coal, valued at \$5,839,079, according to Edward W. Parker of the United States Geological Survey, an increase over 1911 of 278,243 tons in quantity and \$642,013 in value.

To Mine Virginia Copper.

The Warren Copper & Mining Co., Front Royal, Va., has been incorporated with a capital stock of \$150,000 and the following officers: President, T. V. Leach; vice-president, W. H. Board; secretary-treasurer, H. K. Laws.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

The Cotton Movement.

According to the report of Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, the amount of cotton brought into sight during 10 months of the present season was 13,387,343 bales, a decrease under the same period last year of 2,185,782 bales. The exports were 8,320,796 bales, a decrease of 1,912,269 bales. The takings were, by Northern spinners, 2,298,065 bales, a decrease of 373,156 bales; by Southern spinners, 2,683,635 bales, an increase of 231,315 bales. The amount brought into sight during 314 days of the season was 13,434,190 bales, a decrease of 2,184,804 bales. The exports were 8,374,190 bales, a decrease of 1,918,722 bales. The takings were, by Northern spinners, 2,326,111 bales, a decrease of 284,454 bales; by Southern spinners, 2,716,186 bales, an increase of 247,077 bales.

To Cost About \$200,000.

The Southern Aseptic Cotton Co., Chattanooga, writes to the MANUFACTURERS RECORD as follows:

"Our improvements will not be made as early as we contemplated some time ago, but we will more than double our capacity and will install, in connection with our present plant, a bleachery for general bleaching and dyeing, which will cost approximately \$200,000."

Cleveland Mill Enlargements.

The Cleveland Mill & Power Co., Lawndale, N. C., will erect a two-story brick building 185 feet long by 75 feet wide, to be equipped for a dyehouse. This company recently built and equipped an addition for twisting frames and ball winders. It operates 5600 ring spindles, 3000 twister spindles, 12 graders, 36 cards, etc., on the production of cordage, carpet warps, etc.

To Add 60 Looms.

The Tombigbee Cotton Mills, Columbus, Miss., will add 60 automatic looms and make improvements, having awarded contract for the new machinery. This company has 8064 ring spindles, 100 broad looms, 152 narrow looms, 20 cards, etc.

To Add 6000 Spindles.

The Watts Manufacturing Co., Taylorsville, N. C., plans to add 6000 spindles and cone winders, having awarded contract for 2000 spindles and a conditional contract for another 2000, the other contract to be awarded later.

For Rubberized Cloth.

The Amazon Rubber Co., St. Louis, has been organized, with \$100,000 capital stock, by W. H. Schewe, A. Petersen and others. It is now installing machinery for the manufacture of rubberized cloth.

An Oklahoma Company.

The Idabel (Okla.) Cotton Mill Co. has been incorporated, with a capital stock of \$50,000, by Walter L. Neidemier, G. E. Dean and Wm. Mendenhall.

Textile Notes.

The Darlington (S. C.) Manufacturing Co. will, it is reported, replace its fancy and dobby looms with automatic looms for plain cloth. This company operates 51,392 ring spindles, 1077 narrow looms, 388 broad looms, 63 cards, etc., its product being shirtings, prints and satine.

The Cowpens (S. C.) Manufacturing Co. will install three finisher pickers in its recently-completed addition to picker-room. This company operates 17,000 ring spindles, 244 narrow looms, 164 broad looms, 30 cards, etc., on sheeting and yarn production.

The Danville (Va.) Knitting Mills has purchased the Coosa River Spinning Co.'s mill at Bon Air, Ala. This mill is equipped with 6120 ring spindles and accompanying machinery for manufacturing knitting yarns which the Danville company will use in its plant at Danville.

To Build Big Mill.

The Morton Butler Lumber Co., John Clerk, secretary, Maryville, Tenn., is reported as planning the construction of a mill with a daily capacity of 100,000 feet of lumber, in connection with the development of 35,000 acres of Blount county (Tennessee) timber land owned by the company. Morton Butler of Chicago is president.

Big Louisiana Timber Purchase.

The Ascension Red Cypress Co. of New Orleans and the Latcher-Moore Cypress Co. of Latcher have, it is reported, purchased a tract of Louisiana cypress timber land (Southern Cypress Co. holdings) for \$2,000,000.

MECHANICAL

Valve Controlling Mechanism for Airbrakes.

An invention which eliminates the necessity of trainmen going between the cars to open or close the airbrake valve between the adjacent cars of a train has been patented by U. R. Hatfield, 918 Georgia Life Building, Macon, Ga. With the mechanism as here shown, the airbrake valves of a car can be opened or closed from either side of the train with-



AIRBRAKE SAFETY CONTROL MECHANISM.

out the necessity of stepping between the cars.

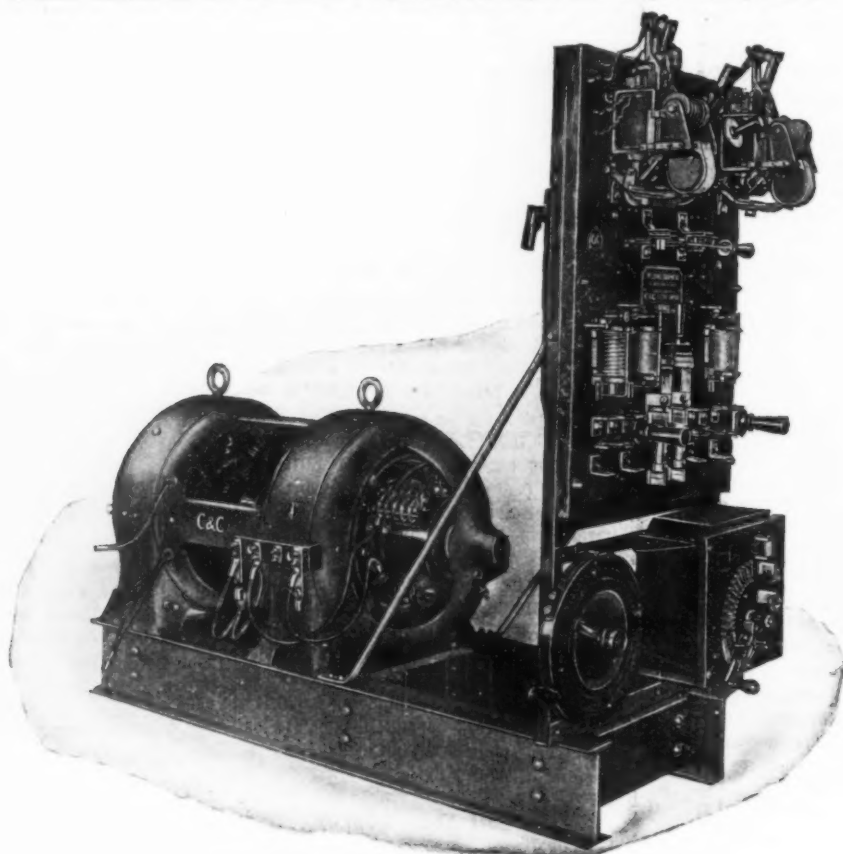
At either end of the car is a horizontal rod having handles projecting downward within easy reach from the ground, while a lever is attached near the middle line of the car to engage one end of a connecting link leading downward to the valve lever, thus enabling the valve to be opened or closed without danger to the operator. The inventor plans to make contract with a manufacturer or railway supply house to make and market this device.

Electric Arc Welding.

The wide application of electric-welding operations is made effective by the

and manufactures extensive lines of equipment and auxiliary outfits for electric welding. The accompanying illustrations show a portable 300-ampere mul-

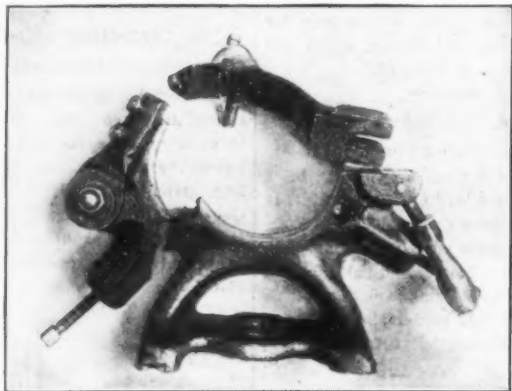
methods and advantages of this company's products are stated and described with illustrations in a comprehensive catalogue recently issued.



MULTIPLE UNIT ELECTRIC WELDING OUTFIT.

various equipments being made to meet the requirements for repairs by means of electric heat and power, and for correct-

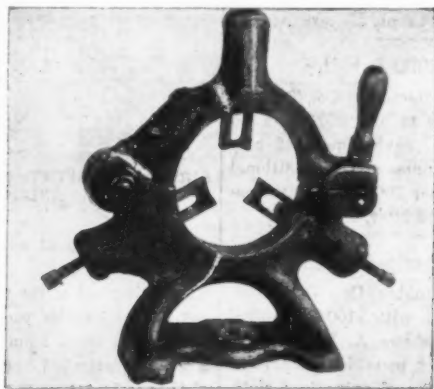
tiple-unit welding outfit and an intricate example of repairs by welding with its equipment.



BROKEN PARTS TO BE WELDED.

ing defects in castings, rectifying blow-holes, shrinkage cracks, breaks in machinery parts that can be quickly and

The apparatus necessary consists of the driving motor direct connected to a welding generator, a switchboard on



REPAIRED PARTS AFTER WELDING.

economically repaired by this means, etc.

The C. & C. Electric & Manufacturing Co., Garwood, N. J., has developed such machinery to a high degree of efficiency,

which the automatic controlling apparatus is mounted, electrode holders, and face and hand shields for operators.

The various operations, equipment,

New Gasoline Locomotive.

A new gasoline locomotive, designed especially for use in mines, but which is also adapted for industrial work, tunneling work, etc., is being built by the Vulcan Iron Works of Wilkes-Barre, Pa.

A 10-ton locomotive is shown in the illustration.

The cost of fuel being comparatively low, and the locomotive being a self-contained unit, all the energy and power being stored within the machine, its advantages are apparent, the absence of sparks, smoke, etc., making it particularly adapt-

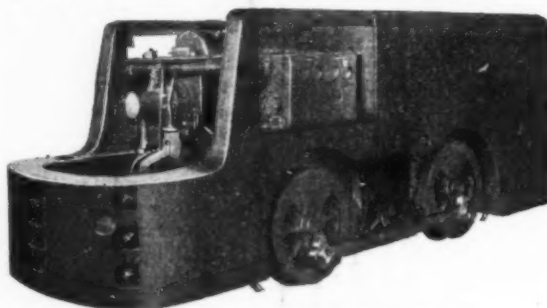
a casing supported by pedestals, and is held in position by wrought-iron caps top and bottom, thus providing for perfect alignment of engine shaft and making it possible to remove the transmission from either the top or bottom of the locomotive for adjustment of bearing, etc. The transmission oiling system consists of a gear pump driven from the engine shaft, which supplies a stream of oil to bearings and gears as soon as the engine is started.

Two multiple disc clutches are used for forward and reverse, made large enough to do the heavy work required of them in starting a load, and located on the high-speed engine shaft. The reverse lever for operating the clutches is located in the most convenient position for the engineer. Pushing the lever ahead throws in the front clutch, and the locomotive runs forward. Pulling the lever in the opposite direction throws the front clutch out, engages the back clutch, and the locomotive runs backward. When lever is in central position both clutches are out, and the locomotive is stopped. The change from low to high speed is made by means of a jaw clutch, which allows the gears to remain in mesh all the time. The jaw clutch is locked in position when the multiple disc clutches are engaged to prevent strain of the transmission in changing speed. The clutch reverse lever, brake lever, change speed lever and the sand box lever are all mounted on the same shaft within easy reach of the engineer.

The coolers are of the large tube radiator type, one on each side of the locomotive. Water is circulated through large diameter tubes by a centrifugal pump, and is cooled by a blast of air from a multivane fan on the engine shaft. The gasoline tanks can be readily removed from the locomotive to be filled outside the mines, or when the locomotive runs outside they may be filled without removing.

The exhaust gases enter a large size muffler, where they pass through a series of baffle-plates and screens and over a body of water, preventing the escape of any fire to the atmosphere and also eliminating noise.

These locomotives are built in five sizes from 4 to 12 tons weight, and speeds from three to six miles per hour in the smaller



VULCAN GASOLINE LOCOMOTIVE.

ed to conditions under which other types would be at a disadvantage.

The gasoline motor is of the heavy-duty slow-speed type, having four horizontal cylinders, placed two on each side of the crankshaft, making a balanced engine having two strokes on each side of the shaft instead of all from the top of the shaft, as in the vertical engine. The crankshaft, connecting rods, cam shaft, valves and push rods are made large and strong, and designed especially for locomotive work.

The transmission is through two large multiple disc clutches on the engine shaft to bevel gear on the jack shaft, and the drive from the jack shaft to the axle is through a series of heavy spur gears hardened and running in oil in an oil-tight casing. The transmission is enclosed in

sizes and 6 to 12 miles per hour in the larger sizes.

Galveston's Exports.

During the fiscal year just ended Galveston, Tex., ranking second among the ports of the country in the value of exports, handled merchandise valued at \$281,430,182, destined for foreign countries, an increase over the preceding year of \$62,289,398. Of the total 1912 export values, something like \$251,000,000, or 89 per cent., represented about 3,875,000 bales of cotton.

The Chamber of Commerce of Shreveport, La., is circulating an attractively illustrated booklet telling of the growth of that community and the opportunities for investment there.

Construction Department

TO OUR READERS!

In order to follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "It is reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be shown on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the postoffice will be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur.

WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular. In most instances a return postal card or addressed and stamped envelope should be enclosed with letter.

In correspondence relating to information published in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$25 per year. On all advertising contracts in the Manufacturers Record for three months or longer a subscription to the Daily Bulletin is included for the contract period.

BRIDGES, CULVERTS, VIADUCTS

Fla., Fernandina.—Nassau County Board of Commissioners will construct bridge; 149 feet; plate girder draw; also 600 feet pile and pile and timber approach; bids received until August 13; Edwin R. Williams, clerk. (See "Machinery Wanted.")

Ky., Burnside.—Virginia Bridge & Iron Co., Roanoke, Va., advises company has contract to erect bridge for F. J. Manley at Burnside, instead of Louisville, Ky., as recently stated.

La., Baton Rouge.—East Baton Rouge Parish Police Jury will ask bids for construction of steel bridges at Indian Mound, Little Sandy Creek, Big Sandy Creek, Pride, White's Bayou and Jones Creek.

Miss., Pass Christian.—Board of Supervisors awarded contract at \$6300 to Austin Bros. of Atlanta, Ga., to erect steel bridge and draw 210 feet long across Tchoutacabouffa River at Lamey Ferry, and authorized Third District Road Commissioners to accept bid of Austin Bros. at \$13,400 to construct bridge 1530 feet long across Bayou Portage.

Mo., Kansas City.—Board of Public Works opens bids August 19 for construction of double-deck viaduct in connection with 12th St. traffic way; improvements, plans and specifications may be obtained from Waddell & Harrington, consulting engineers; estimated cost of viaduct and regrading about \$600,000.

Mo., St. Louis.—City will vote on \$3,500,000 bonds for bridge construction. Address The Mayor.

N. C. Matthews.—Mecklenburg county

will expend \$8650 to construct bridge 307 feet long and 16 feet wide over McAlpine Creek; Wilbur J. Watson & Co., engineers. (C. W. Requarth Company of Charlotte, N. C., recently noted as having contract.)

N. C., Southport.—Brunswick County Commissioners plan to construct bridge, cost not more than \$300,000, across Brunswick River. (See N. C., Brunswick.)

N. C., Wilmington.—New Hanover County Commissioners, Wilmington, plan to construct bridge, cost not more than \$40,000, across Cape Fear River; also highway connecting Cape Fear and Brunswick rivers; Brunswick County Commissioners, Southport, N. C., plan to construct bridge, cost not more than \$300,000, across Brunswick River; Brunswick county plan conditional upon New Hanover county constructing bridge and highway.

Tenn., Maryville.—Maryville-Knoxville Interurban Railway Co., John M. Clark, secretary, will construct three to four bridges, one 150 feet long and others 40 to 50 feet long.

Tex., Denison.—Red River Bridge Co. of Texas awarded contract to Midland Bridge Co., Kansas City, Mo., to construct bridge across Red River, consisting of two 287-foot spans and one 100-foot span; concrete and cylinder piers; cost \$60,000; material purchased; J. C. Feild, engineer in charge. (Recently noted.)

Tex., Seabrook.—Galveston County Commissioners, Galveston, Tex., and Harris County Commissioners at Houston, Tex., are considering construction of drawbridge over Clear Creek; concrete based steel; cost about \$15,000.

Va., Petersburg.—City contemplates constructing bridge over Appomattox River; concrete; ornamental cast-iron railings;

St., Baltimore, to construct brick kiln shed; 36x146 feet; two stories.

Mo., Kansas City.—Tile.—Midland Flexotile Co., capital stock \$2500, incorporated by Geo. E. Kinney, C. T. Hamlya and J. H. Robertson.

W. Va., Chester.—Pottery.—Taylor, Smith & Taylor Company will build pottery addition; one and two stories; 500x250 feet; estimated cost \$150,000; architect, C. M. Metsch, East Liverpool, O.

W. Va., Thornton.—Fire Bricks.—Thornton Fire Brick Co., Clarksburg, W. Va., will erect plant to replace burned plant; loss \$75,000; fireproof construction; buildings destroyed included paving-brick department, 75x40 feet, containing brick machine and pug mill of about 150,000 bricks daily capacity; hand-made fire-brick department, 157x70 feet, containing wet pans, hand presses, molds, dryer cars, steam and water piping, shafting, pulleys, etc.; also power plant and dryer tunnels. (Recently noted.)

COAL MINES AND COKE OVENS

Ala., Tuscaloosa.—Alabama & New Orleans Transportation Co. (referring to unauthorized reports that it purchased 16,000 acres coal land on Black Warrior River) writes to Manufacturers Record: "Have leased 3000-acre tract, while those associated with us have other coal interests adjacent to this lease; our company only interested in 3000 acres, being developed with drift mine system; have at present eight openings, making a total capacity 100 tons a day, which is rapidly increasing." Offices in Hibernia Bank Bldg., New Orleans, La.

Ark., Heber Springs.—D. M. McGraw of Altus, Ark., local superintendent of Wester

CONCRETE AND CEMENT PLANTS

Va., Norfolk.—Portland Cement.—R. E. Griffith, vice-president Giant Portland Cement Co., Pennsylvania Bldg., Philadelphia, Pa., writes to Manufacturers Record: "We propose making several changes to our Norfolk plant; will not be in operative shape for next 60 days."

COTTON COMPRESSES AND GINS

Ark., Carlisle.—Raborn Bros. will erect cotton gin.

Ark., Garland.—Garland Gin Co., capital stock \$10,000, incorporated by Enoch W. Frost, W. B. Booker, E. J. Wilson and others.

Ark., Hermitage.—Hermitage Gin Co. organized by J. B. Roddy, L. W. Baker and J. W. Clower to erect cotton gin.

Ga., Sycamore.—Farmers' Gin Co. incorporated, capital stock \$16,000, to rebuild burned gin.

Okla., Durant.—Farmers' Co-operative Gin Co. incorporated by R. Roberts, C. W. James, P. H. Harville and others.

Okla., Marlow.—Everybody's Gin Co. (recently noted incorporated with \$5000 capital stock) organized; R. F. Dempsey, president and manager; J. C. Short, vice-president; R. E. Bledsoe, secretary-treasurer; awarded contract to erect cotton gin and for equipment. (See "Machinery Wanted.")

Okla., Wetumka.—Wetumka Gin Co., capital stock \$8000, incorporated by J. F. Lucas, M. L. Kitchens, H. M. Brazil, E. D. Hall and others.

Tex., Eastland.—Roper & Lauderdale will expend \$8000 to \$9000 to erect cotton gin; install five 80-saw gins; machinery recently reported ordered.

Tex., Farmersville.—Farmers' Co-operative Gin Co., capital stock \$18,000, incorporated by J. F. Lovell, A. A. Reagan and H. M. Bumpass.

Tex., Buda.—Buda Gin Co., capital stock \$5000, incorporated by Will G. Barber, H. S. Barton and W. E. Evans.

Tex., Velasco.—Velasco Gin Co. incorporated; to install \$5000 in plant; has awarded contract.

COTTONSEED-OIL MILLS

N. C., Edenton.—Chowan Cotton Oil & Fertilizer Co. will erect cottonseed-oil mill. (See "Machinery Wanted.")

S. C., Kershaw.—Kershaw Oil Mill, Fred C. Culvern, manager, advises Manufacturers Record his company is adding 12,500 square feet storage space; is reconstructing seed-house to have capacity of 5000 tons of seed, which will double former capacity; awarded contract for sprinkler system.

DRAINAGE SYSTEMS

Fla., Palm Beach.—Orrin Randolph, office at Lake Worth, Fla., chief engineer of Palm Beach Farms Co., writes to Manufacturers Record: "Palm Beach Farms Co. has let contract to A. B. Sanders, Miami, Fla., for drainage reclamation in Palm Beach county; main outlet canal about 9½ miles long; average top and bottom width 50 feet, and depth 11 feet; secondary canals about 24 miles, average depth 7 feet, on which dykes will be constructed to prevent overflow; three canals connecting fresh water lakes will be about four miles long; total length of lateral canals about 36 miles; average top and bottom width 20 feet, with depth 6 feet; dyke work (24 miles) will have minimum height 6 feet; entire system to protect from possible overflow from Everglades of 110,000 to 115,000 acres; actually drain in detail about 55,000 acres; estimated yardage 2,500,000—80 to 85 per cent. earth and 15 to 20 per cent. rock; estimated cost \$250,000 to \$400,000; this does not include road construction and other development features."

La., Lafayette.—First drainage district votes August 19 on \$100,000 drainage bonds. Address District Commissioners.

ELECTRIC PLANTS

Fla., Winter Park.—Town will construct electric-light plant; 25 to 100 horse-power; erect fireproof and brick building to cost \$1000; cost of plant \$6000 to \$8000; construction bids not asked; H. E. Cole, superintendent; finance committee recently noted as to issue \$10,000 bonds. (See "Machinery Wanted.")

PROPOSAL ADVERTISEMENTS

IN THIS ISSUE ARE

PUBLISHED ON PAGES 82 and 83

In order to secure best bids from leading engineers, contractors and investment houses, the proposal advertising columns of the Manufacturers Record are invaluable.

Rate 20 cents per line per issue.

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Proposal Advertising must reach us not later than 9 A. M. Wednesday.

seven arches; level roadway; ornamental lighting; asphalt paving; cost \$47,000. Address The Mayor.

CANNING AND PACKING PLANTS

Fla., Auburndale.—E. M. Baynard will enlarge and remodel packing plant.

Fla., Auburndale.—Directors of Auburndale branch of Florida Citrus Exchange will enlarge packing plant and install complete new equipment.

Fla., Orlando.—Walter Drennen will erect fruit packing plant; 120x180 feet; corrugated siding and roofing; cost of equipment, \$3500; daily capacity, six cars fruit. (Recently noted.)

La., New Orleans.—Packing.—Clark-Harvey Packing Co., capital stock \$25,000, incorporated by Louis Harvey, Emile Harvey, P. H. Clark and others.

N. C., Charlotte.—Mecklenburg County Commissioners considering issuance of \$110,000 bonds, to include \$35,000 for construction of bridges.

Tex., Poteet.—M. R. Stukes, San Antonio, Tex., is reported as to establish cannery.

Tex., Rockport.—City will vote on \$155,000 bonds to construct bridge and road across Capano Bay. Address The Mayor. (See "Road and Street Work.")

CLAYWORKING PLANTS

Ky., Mayfield.—West Kentucky Clay & Tile Co., capital stock \$3500, incorporated by C. C. Pace, E. T. Downs, E. A. Morgan and T. A. Miller.

La., Mandeville.—Bricks.—Poltevant & Favre Lumber Co., New Orleans, La., will, it is reported, build brick works.

Md., Baltimore.—Pottery.—Edwin Bennett Pottery Co., Fleet and Eden Sts., awarded contract to J. Schamberger, 2122 E. Baltimore

Coal & Mineral Co., Denning, Ark., is taking options on 10,000 acres coal lands; headquarters of company, St. Louis, Mo.

Ky., Coxton.—Harlan Coal Mining Co., Pineville, Ky., will develop another large coal operation.

Ky., Harlan County.—T. B. Mahan, Williamsburg, Ky., president of Southern Mining Co., and F. D. Wood, Pineville, Ky., president of Wallins Creek Coal Co., have subleased two tracts of coal land on Clover Creek and will develop.

Ky., Idamay.—Duck Fork Coal Co. incorporated by A. E. Richards, A. C. Ronald and G. W. Gourley.

Okla., Milton.—Dr. S. T. Peet and associates will have first option on 640 acres of coal property; contemplate development.

Okla., Schulters.—Schulter Coal Mining Co., 306 Central National Bank Bldg., Tulsa, Okla. (recently noted incorporated with \$100,000 capital stock and to have purchased Schulters Coal Mining & Coke Co.), organized; N. J. Kampers, president and treasurer; G. Meyer, vice-president; A. Campbell, secretary; R. T. Strain, manager; will further develop 500 acres coal property; daily output 300 to 500 tons; will construct two or three coke ovens; ovens bids opened in about three months; opens bids on or about August 1 for mining machinery. (See "Machinery Wanted.")

Tenn., Davidson.—Highland Coal & Lumber Co., capital stock \$25,000, incorporated by W. V. Davidson, M. F. Greene, Lucien Clark and others; now developing mines.

W. Va., Sherman.—Huddestone Coal & Coke Co., capital stock \$100,000, incorporated by J. A. Huddestone of Excelsior, W. Va.; H. M. Bertolet and G. C. Borden of Charleston, W. W. Whyte of Welch, W. Va., and others.

Ga., Reidsville.—City has contracted with Modern Equipment Co., Savannah, Ga., to erect electric-light plant; dynamos operated by two kerosene engines, 30 and 70 horsepower; cost of plant about \$6000.

Ky., Louisville.—Louisville Gas & Electric Co., 311 W. Chestnut St., authorized capital stock \$15,000,000, will now issue \$7,500,000 to acquire Kentucky Electric Co., pipe gas to Louisville from West Virginia field, and general plans for merged utilities; Donald McDonald, general manager; Kentucky Pipe Line Co. (recently reported incorporated with \$2,000,000 capital stock) will operate pipe line; engineers, H. M. Bylesby & Co., Insurance Exchange Bldg., Chicago, Ill. (Merger lately detailed.)

Mo., Ellsinore.—McDonald Charcoal Iron Co. plans to construct electric plant.

Mo., Jefferson City.—State Capitol Commissioners will advertise for bids for construction of tunnel under Capitol and for power-house at State park; cost about \$100,000; Tracy & Swartwout, architects, 244 Fifth Ave., New York.

Mo., Joplin.—City votes July 22 on \$75,000 bonds for enlarging lighting system. Address The Mayor.

Mo., Neck.—City granted electric-light franchise to company, A. M. Baird, Cartersville, Mo., attorney; estimated cost of plant, \$25,000.

N. C., Tryon.—Tryon Electric Service Co. advises plans not fully determined for extension of transmission line to Landrum, S. C., three miles distant. (Recently noted.)

N. C., Wilson.—Board of Public Works engaged Gilbert C. White, Charlotte, N. C., as consulting engineer for construction of electric-light plant. (Bond issue \$80,000 previously noted voted.)

S. C., Lake City.—City voted \$7500 bonds for electric-light installation. Address The Mayor.

Tex., Bay City.—Texas Public Service Co., controlled by Albert Emanuel Company of Dayton, Ohio, is having improvement plans prepared by Robert M. McCandlish Engineering Co., Kansas City, Mo. (See Tex., Gilmer.)

Tex., Commerce.—City contemplates installation of electric plant and water-works; cost approximately \$10,000. Address The Mayor.

Tex., El Paso.—El Paso Electric Railway Co. will construct substation to furnish electric power for interurban railway.

Tex., Gilmer.—With reference to plans of Texas Public Service Co., Albert Emanuel Company of Dayton, O., writes to Manufacturers Record: "Have not fully decided upon question of increased capacity of plants; expect to thoroughly rehabilitate all and to extend and improve them sufficient to take care of demands of these various communities. Plans and specifications being prepared by Robert M. McCandlish Engineering Co., Kansas City, Mo.; date of opening bids not yet decided." (Texas Public Service Co., capital stock \$500,000, lately reported incorporated, etc.; controls ice and light plants at Gilmer, Mt. Pleasant, Vernon and Bay City.)

Tex., Houston.—City Commissioners and Ben T. Campbell, Mayor, contemplate construction of municipal electric-light plant; now investigating preliminary plans and estimates.

Tex., Marble Falls.—City contemplates installation of light plant and water-works. Address The Mayor.

Tex., Mt. Pleasant.—Texas Public Service Co., controlled by Albert Emanuel Company of Dayton, O., is having improvement plans prepared by Robert M. McCandlish Engineering Co., Kansas City, Mo. (See Tex., Gilmer.)

Tex., Vernon.—Texas Public Service Co., controlled by Albert Emanuel Co. of Dayton, O., is having improvement plans prepared by Robert M. McCandlish Engineering Co., Kansas City, Mo. (See Tex., Gilmer.)

Tex., Wichita Falls.—United Fuel & Power Co., capital stock \$30,000, incorporated by John W. Dyson, Andrew Urban and C. E. Menzie.

FERTILIZER FACTORIES

Ala., Eclectic.—Lee Hornsby, cashier of Bank of Eclectic, is interested in erection of fertilizer plant.

Ga., Dawson.—Alabama Chemical Co. will erect fertilizer factory; cost about \$100,000; John S. Lowrey, manager.

Md., Baltimore.—D. B. Martin Company, Gwynn Falls and Wilkens Ave., is having plans prepared by C. B. Comstock, New York, for rebuilding burned plant; four stories; brick and concrete; fireproof; cost

\$80,000. (Lately erroneously noted under "Electric Plants.")

Md., Salisbury.—Farmers & Planters' Company will construct three-story addition to fertilizer-mixing plant; will double capacity and install new machinery.

FLOUR, FEED AND MEAL MILLS

N. C., Alta Pass.—Model Mill Co., J. W. Ring, president, will issue \$50,000 preferred stock.

N. C., Browns Summit.—Reedy Fork Roller Mills Co., capital stock \$50,000, incorporated by J. L. Haynes, C. A. Gray and J. P. Sanders, all of Greensboro, N. C.

Okl., Oklahoma City.—E. W. Wales & Co. awarded contract to Will D. Hawkins, Oakland, Kans., to erect flour, feed and cornmeal mill and elevator; to include four buildings; 36x50 feet, 30x50 feet and 24x40 feet; elevator fireproof; capacity 50 bushels grain; cost of machinery (purchased) \$16,000; daily capacity 300 barrels flour and 100 barrels cornmeal and feed. (Recently noted.)

FOUNDRY AND MACHINE PLANTS

Ala., Huntsville.—Foundry, etc.—Huntsville Foundry & Machine Works, J. H. Leslie, manager, increased capital stock to \$50,000; will improve plant.

Ky., Louisville.—Brakes.—McGrath Automatic Brake Co., capital stock \$10,000, incorporated by J. A. McGrath, R. H. Menefee and J. M. Scott.

Ky., Paducah.—Cars, etc.—Paducah Traction Co. has plans by Stone & Webster Engineering Corporation, Boston, Mass., for car repair and storage shops; 200x100 feet; brick covered with asbestos protected metal; tar and gravel roof; bids opened about July 15. (Recently noted under "Railway Stations.")

Mo., St. Louis.—Foundry.—King Foundry Co. increased capital stock from \$25,000 to \$40,000.

Mo., St. Louis.—Foundry, etc.—Western Foundry & Sash Co. increased capital stock from \$10,000 to \$35,000.

N. C., Lexington.—Bridges.—Carolina Bridge & Iron Co., capital stock \$125,000, incorporated; C. F. Hawkins, president; J. C. Bower, vice-president; John R. Hoffman of Burlington, N. C., treasurer; erect extension to plant; 150x50 feet; steel columns and roof trusses; wood siding; bids opened about August 1; cost of additional equipment, \$5000; additional general equipment purchased; 5000 tons structural steel annual capacity; A. E. Priest, construction engineer, Lynchburg, Va.; John R. Hoffman lately noted to establish bridge and iron plant. (See "Machinery Wanted.")

Okl., Muskogee.—Drilling Machines.—Muskogee Well Drill Manufacturing Co., care of Commercial Club, secured building at C and Callahan Sts. and will remodel for plant to manufacture oil and water well-drilling machines.

Tex., Fort Worth.—Machinery.—Bryant Machinery Co., capital stock \$5000, incorporated by B. H. Mason, C. R. Bryant and H. K. McCollum.

GAS AND OIL ENTERPRISES

Fla., St. Petersburg.—Gas Plant.—A. C. Phell is corresponding with Mr. Miller of Ohio relative to establishment of gas plant.

La., St. Martinville.—Catahoula Oil Co. organized with James J. Martin president and Robert Martin secretary; to develop 2000 acres of land on Lake Catahoula; E. A. Davis, contractor.

Miss., Laurel.—Gas Plant.—John T. Bacon, Cincinnati, O., has franchise for gas plant.

Okl., Muskogee.—Cromwell Oil & Gas Co., capital stock \$5000, incorporated by A. Z. English, J. I. Cromwell and William J. Cook.

Okl., Oklahoma City.—Ponkirk Oil & Gas Co., capital stock \$10,000, incorporated by James R. Armstrong, Oliver C. Black and R. W. Day.

Okl., Oklahoma City.—B. & O. Oil & Gas Co., capital stock \$7500, incorporated by C. J. Bowman, W. A. Ledbetter, R. E. Stafford and G. C. Jones.

Okl., Oklahoma City.—Loret Oil Co., capital stock \$4000, incorporated by Guy Blackwelder, Leroy Paddock and S. K. Bernstein.

Okl., Tulsa.—Red Star Oil Co., capital stock \$20,000, incorporated by B. T. Haines, B. H. Martin and A. F. Moss.

Okl., Tulsa.—Crumrine Oil Co., capital stock \$10,000, incorporated by I. W. W. Crumrine of Independence, Kans.; S. H. Barry of Caney, Kans., and Jas. A. Veasey of Tulsa.

Okl., Tulsa.—Bliss Oil Co., capital stock

\$5000, incorporated by Chas. Bliss, T. B. Bliss, G. L. Parriss and others.

S. C., Rock Hill.—Gas Plant.—Rock Hill Gas Co., capital stock \$80,000, incorporated by J. W. Lynch, C. K. Christberg and A. M. Worstell; will build plant for which Kuemmerle & Co., Philadelphia, Pa., recently received franchise; Mr. Lynch in charge of installation; offices in People's National Bank Building. (Lately mentioned.)

Tex., Corpus Christi.—Neuces Oil Co., capital stock \$5000, incorporated by L. C. Doney, J. L. Welch and W. L. Dinn.

Tex., Jefferson.—Pipe Line.—Jefferson Progressive Club is organizing corporation to pipe natural gas from Caddo oil field in Louisiana to Jefferson, 25 miles distant; will use 6 to 12-inch wrought-iron line pipe and specials; ready to correspond with pipe manufacturers and contractors for pipelaying. Address George S. Niedermeier, chairman natural gas committee. (See "Machinery Wanted.")

W. Va., Clarksburg.—McKim Oil Co., capital stock \$50,000, incorporated by B. F. Thompson, W. D. Wanster, J. C. McManaway and others.

W. Va., Mt. Clare.—Bartlett Oil & Gas Co., capital stock \$10,000, incorporated by W. H. Fisher of Buckhannon, W. Va.; C. W. Cornick of Parkersburg, W. Va.; W. P. Weekly of Mt. Clare and others; offices at Parkersburg, W. Va.

ICE AND COLD-STORAGE PLANTS

Fla., Orlando.—Orlando Water & Light Co., William P. Beeher, president, will erect ice plant directly over present plant, increasing capacity from 20 to 60 tons daily.

Ky., Carlisle.—Carlisle Ice Co. reported organized with \$15,000 capital stock to erect ice plant.

Md., Baltimore.—Greenwald Packing Co., Brunswick St. near Wilkens Ave., awarded contract to J. J. Walsh & Son, 1533 Maryland Ave., Baltimore, to erect addition to cold-storage plant; one story and basement; brick; 23x16 feet; cost \$5000; plans by D. Otto Kubitz; 719 Gorsuch Ave., Baltimore. (Lately noted.)

Md., Havre de Grace.—William E. Veasey will install ice plant; 25 tons daily capacity. (See "Machinery Wanted.")

N. C., Concord.—Arthur B. Pounds will erect addition to ice plant; one story; 54x70 feet; daily capacity, 22 tons ice.

N. C., Spray.—R. P. Ray is interested in installation of 15 to 20-ton ice plant and steam laundry to accommodate population of 5000 to 10,000. (See "Machinery Wanted.")

Tex., Bay City.—Texas Public Service Co., controlled by Albert Emanuel Company of Dayton, O., is having improvement plans prepared by Robert M. McCandlish Engineering Co., Kansas City, Mo. (See "Electric Plants.")

Tex., Gilmer.—Texas Public Service Co., controlled by Albert Emanuel Co. of Dayton, O., is having improvement plans prepared by Robert M. McCandlish Engineering Co., Kansas City, Mo. (See "Electric Plants.")

Tex., Mt. Pleasant.—Texas Public Service Co., controlled by Albert Emanuel Company of Dayton, O., is having improvement plans prepared by Robert M. McCandlish Engineering Co., Kansas City, Mo. (See "Electric Plants.")

Tex., Vernon.—Texas Public Service Co., controlled by Albert Emanuel Company of Dayton, O., is having improvement plans prepared by Robert M. McCandlish Engineering Co., Kansas City, Mo. (See "Electric Plants.")

Va., Exmore.—Exmore Ice & Storage Co. organized; J. T. B. Hyslop, president; J. W. Chandler, vice-president; W. E. Walker, secretary-treasurer; will erect ice plant to cost \$20,000. (Previously noted.)

IRON AND STEEL PLANTS

Ala., Mobile.—Steel Works.—Mobile Steel Co., capital stock \$25,000, incorporated with Walter Voigt, New York, president; A. G. Krenicke, Madison, Wis., vice-president; H. M. Evans, Mobile, secretary.

Mo., Ellsinore.—Iron Furnace.—J. H. McDonald, president of McDonald Charcoal Iron Co., wires Manufacturers Record: "100-ton daily capacity charcoal furnace and American Grondal style by-product plant; complete plant and equipment to cost \$400,000; plans not complete; L. W. Searles, Woodward Bldg., Birmingham, Ala., consulting engineer and engineer of construction." Mr. Searles writes to Manufacturers Record: "Work will include chemical, mining and concentrating plants, dwellings for operatives and local officials, etc.; plant to

be most modern in construction, with labor-saving features; plans being prepared in my office and construction will begin in August." See "Mining." (Recently reported as to build furnace, etc.)

Va., Roanoke.—Iron Furnace.—David Flick-wir purchased West End Furnace Co.'s iron furnace at Roanoke and iron-ore mines at Interior, Va. (See "Mining.")

W. Va., Warwood.—Steel Plant.—Wheeling Steel Casting Co. (formerly Alloy Steel Casting Co.) will enlarge plant and install additional new machinery; is constructing 15-ton acid open-hearth steel furnace to make steel castings up to 20 tons weight; company wires Manufacturers Record: "Building 71x240 feet; furnace capacity, 1000 tons castings per month; ready to operate September 1."

LAND DEVELOPMENTS

Fla., Miami.—Hugh Matheson purchased 800 acres of land at Cape Florida, and will develop.

Ky., Louisville.—Southern Development Co., capital stock \$4000, incorporated by C. N. Mullican and J. A. Thomas.

Ky., Newport.—Ellemchem Operating & Developing Co., capital stock \$10,000, incorporated by J. B. Schmitt, R. A. Becker, Louis A. Bleach and E. B. Totten.

La., Vinton.—Vinton Townsite Co., capital stock \$12,000, incorporated with C. P. Hampton, president; J. J. Dubourg, vice-president; L. P. Vincent, treasurer.

Mo., Kansas City.—Prospect Vista Land Co., 829 New York Life Bldg., will develop 57 acres at 55th St. and Prospect Ave.; subdivide into 40-foot lots; cost of improvements \$50,000. (Recently noted incorporated by John Nicholson and others.)

Mo., Kansas City.—Dual Land Co., capital stock \$50,000, incorporated by E. C. Pollard, John B. Pollard and R. E. Caldwell.

Mo., Ellsinore.—McDonald Charcoal Iron Co. will develop land for industrial town to be named Steel City; plans to construct water-works and electric plant, erect office buildings, etc.

Mo., St. Louis.—Black River Land Co. incorporated by Wylie Crell, George W. Lee and A. J. Horn.

N. C., Charlotte.—Greater Charlotte Finance & Realty Co., capital stock \$125,000, incorporated by W. A. Ebert, Cameron Morrison and J. H. McLain, all of Charlotte; D. R. Creecy and Julian Gunn, both of Richmond, Va.; purchased property and will subdivide into building lots; will lay several miles sidewalks, grade streets, etc. (D. R. Creecy and others recently noted as to develop property acquired from Paul Chatham.)

N. C., Wilmington.—Wilmington Beach Corporation, capital stock \$50,000, incorporated with Chas. C. Chadbourne president, L. W. Davis vice-president, D. N. Chadwick, Jr., secretary-treasurer; to develop seaside resort south of Carolina Beach; will construct 24-foot boardwalk one mile long, macadam boulevard, board sidewalks, hotels, bathhouses, garages, water-works, electric-light plant, etc.; offices, 14 Princess St.

Okl., Milton.—Dr. S. T. Peet and associates purchased 275 acres of land to develop townsite; will subdivide into 909 city lots; plans include securing establishment of canning, pickling, kraut, jelly and vinegar factories, creamery, dairy, shirt and overall factory; also poultry raising, truck gardening, fruit and berry culture.

S. C., McBee.—Chesterfield Farms Co., capital stock \$100,000, incorporated by A. L. Dargan, Geo. E. Dargan and B. W. Wofford, all of Darlington, S. C.

Tenn., Collierville.—Collierville Land Co., capital stock \$20,000, incorporated by J. A. Winkleman, R. B. Bicknell, H. G. Jett and others.

Tex., Austin.—Industrial Development Co., capital stock \$50,000, incorporated by Joe C. Kerbey, John F. Butler and E. B. Robinson.

Tex., Dallas.—White Rock Land Co., capital stock \$45,000, incorporated by J. S. Kendall, William Doran and John T. Jones.

Tex., Kingsville.—Kleberg County Development Co., capital stock \$26,000, incorporated by C. W. Brown, B. F. Wilson and E. D. Staggs.

Va., Alexandria.—Herman F. Schuettler, E. N. Manning and Rev. Jacob Pfister, all of Chicago, Ill., are reported as planning purchase of 15,000 acres Virginia land for agricultural development.

Va., Norfolk.—Simpson Land Corporation, capital stock \$50,000, incorporated with Henry Fox, president; R. B. Mitchell, vice-president; J. O. Perry, secretary-treasurer.

Va., Richmond.—Greater Bon Air Realty Corporation, capital stock \$15,000, incorporated with John T. Howe, president; C. C. Walton, Jr., vice-president, and Irving E. Campbell, secretary.

Va., Richmond.—Appleton Land Corporation, capital stock \$25,000, incorporated with J. R. Tucker, president; J. C. Duke, vice-president; W. C. Smith, secretary.

Va., Salem.—Roanoke Valley Orchards increased capital stock from \$300,000 to \$500,000.

LUMBER MANUFACTURING

Ala., Greensboro.—Stratton Bros. will rebuild drykiln; brick and concrete; construction by owner. (Recently reported burned.)

Ala., Pollard.—Lindsey Lumber Co. will rebuild sawmill lately reported burned.

Ark., Reydel, P. O. at Langford.—Big Bayou Lumber Co. will erect sawmill; 30x30 feet; mill construction; galvanized-iron covered; cost \$1000. (Previously noted incorporated with \$10,000 capital stock by Henry Kruse and others.)

Fla., Pace.—Escambia Mill Co. will expend \$20,000 to erect planing mill to replace burned mill; machinery and all construction material ordered; daily capacity, 50,000 feet lumber. (Recently noted.)

Ga., Augusta.—Woodward Lumber Co. will expend several thousand dollars for improvements and enlargements to plant; will install electrically-driven sawmill, etc.

La., Coushatta.—Whaley Lumber Co., will erect sawmill.

La., New Orleans.—Ascension Red Cypress Co. and Lutecher-Moore Cypress Co., Lutecher, La., are reported to have purchased cypress timber land (from holdings of Southern Cypress Co.) at \$2,000,000.

Md., Cumberland.—Mutual Lumber Co., capital stock \$25,000, incorporated by John R. Warfield, Paul M. Wineow and Perry Warfield.

Okl., Milton.—Dr. S. T. Peet and associates will install two sawmills to cut hardwood and other timber.

Okl., Sapulpa.—Allen Lumber Co., capital stock \$10,000, incorporated by Joe H. Allen, S. Leona Allen and J. D. Berry.

Tenn., Davidson.—Highland Coal & Lumber Co., capital stock \$5,000, incorporated by W. V. Davidson, M. F. Greene, Lucien Clark and others.

Tenn., Maryville.—Morton Butler Lumber Co. will, it is reported, build sawmill with daily capacity 100,000 feet lumber and develop 35,000 acres timber land; president, Morton Butler of Chicago, Ill.; secretary, John Clark of Maryville. (Recently incompletely mentioned.)

Tex., Beaumont.—Southland Lumber Co. increased capital stock from \$10,000 to \$20,000.

Tex., Graham.—Morrison-Smith Lumber Co., capital stock \$50,000, incorporated by John E. Morrison, Cleo Smith, J. P. McKinney and others.

Tex., Spring.—George C. Rice Lumber Co. will operate plant of Bush Bros. Lumber & Milling Co.; will not erect new plant. (Recently noted to increase capital stock to \$15,000.)

Va., Princess Anne.—Princess Anne Lumber Co., capital stock \$10,000, incorporated with George N. Everton, president; A. E. Kellam, secretary-treasurer.

W. Va., Elkins.—West Virginia Pulp & Paper Co., 290 Fifth Ave., New York, has, it is reported, purchased 10,000 acres timber land (Davis and Elkins interests) on Gauley Mountain, in Randolph and Webster counties, for \$750,000; dispatches state company will soon begin development.

W. Va., Huntington.—C. L. Ritter Lumber Co. has, it is reported, purchased 12,000 acres timber land from Rock Castle Lumber Co. at about \$500,000.

METAL-WORKING PLANTS

Mo., Hannibal.—Fencing.—Homestead Fence Co., capital stock \$20,000, incorporated by Jasper Butler, W. B. Arnold and J. J. Bowles.

Mo., Carthage.—Spring Beds.—Legget & Pratt Spring Bed & Manufacturing Co. increased capital stock from \$350,000 to \$500,000; to increase capacity of plant.

MINING

Ala., Sylacauga.—Marble.—Marble City Quarries Co. organized to develop marble lands near Sylacauga.

Fla., Pembroke.—Phosphate.—C. C. Memminger of Lakeland, Fla., general manager of Coronet Phosphate Co., wires Manufacturers Record: "Plant and property of

Compagnie Generale des Phosphates de la Floride purchased by Coronet Phosphate Co., 99 John St., New York, and Lakeland, Fla.; plant thoroughly efficient and equipped with Diesel engines as prime movers; property containing large deposits high-grade land pebble phosphate; will be operated by Coronet Phosphate Co. under same management." An unconfirmed dispatch states purchase involves \$1,250,000.

Mo., Ellsinore.—Iron and Limestone.—McDonald Charcoal Iron Co. will develop 8000 to 10,000 acres iron-ore land; plans include concentrating plant, 400 tons daily capacity, taking ore direct from mines to ore bins; also developing limestone property and constructing 2½-mile railway.

Mo., Joplin.—Lead, etc.—Oak Orchard Mining Co., Room 17, 521 Main St., has 47 acres of mining property; not operating at present; cost of machinery \$1500; E. W. Hoffman, president, Box 10, Joplin; J. H. Johnson, vice-president; A. R. Snyder, secretary-treasurer. (Recently noted incorporated with \$20,000 capital stock.)

Mo., Joplin.—Lead and Zinc.—Colonel Mack Mining Co. will develop 40 tons of lead and zinc deposits in West Joplin mining district; daily capacity 300 tons; construct concentrating plant; machinery arrangements practically made; W. E. Brinkerhoff, president; A. M. Tebbitts, vice-president; W. J. Borries, secretary. (Recently noted incorporated with \$0,000 capital stock.)

Mo., Joplin.—Lead and Zinc.—A. F. Dexter & Co., now developing mining properties, will erect 200-ton mill; Charles Wells, superintendent of mines.

Mo., Joplin.—Lead and Zinc.—Seven-Eleven Mining Co. (Charles Wells, Franklin Smith and others) now developing lead and zinc properties, will open additional mines, construct mill, etc.

Mo., Zinc (not a postoffice).—Leon L. Brown, Joplin, Mo., has leased 500 acres of land on Gladstone property and will develop.

Okl., Miami.—Tripoli.—Edward McConkey of Peoria, Okla., and others will develop 250 acres of land containing tripoli deposits.

Va., Front Royal.—Copper.—Warren Copper & Mining Co., capital stock \$150,000, incorporated with T. V. Leach, president; W. H. Board, vice-president; H. K. Laws, secretary-treasurer.

Va., Interior.—Iron.—David Flickwir, Roanoke, Va., purchased West End Furnace Co.'s iron-ore mines, etc. (See "Iron and Steel Plants.")

Va., Sandberg (not a postoffice).—Silica.—Virginia Silica Rock & Sand Corporation, capital stock \$50,000, organized with J. H. Wingate, president, Roanoke, Va.; Lee J. Barbee, Graham, Va., vice-president; Warren W. Cline, secretary; Walter Suddith, manager, both of Falls Mills, Va.; leased Cataba silica mines and will develop; is installing additional machinery for dry process with capacity 400 tons daily; general office, Falls Mills.

MISCELLANEOUS CONSTRUCTION

Ala., Fort Morgan.—Coaling Docks, etc.—J. D. Hand, vice-president of Ten Lakes Land Co., Onava, N. M., writes to Manufacturers Record: "I own about 5000 acres peninsular and deep-water harbor at Fort Morgan and Navy Cove, south of and across bay from Mobile; it is an ideal place for coaling station, as coal can be floated down from Birmingham district; it is also one of closest harbors on Gulf to mouth of Panama Canal; have not plans at present to develop this property; have dock and wharf plans approved by Secretary of War."

Ark., England.—Levee.—Plum Bayou Levee District asks bids, received until July 18 (extended date), for construction of about 6000 feet new levee recently noted; as originally located, levee 6000 feet long and contains about 100,000 cubic yards; alternate location, 5000 feet long and about 86,000 cubic yards; engineers, Dickinson & Watkins, State Bank Bldg., Little Rock, Ark. (See "Machinery Wanted.")

Ark., Marion.—Board of directors St. Francis Levee District, O. N. Killough, president, will construct 5,000,000 cubic yards levee work; bids received until August 1; further information, etc., on application to B. G. Covington, chief engineer, 664 Randolph Bldg., Memphis, Tenn. (See "Machinery Wanted.")

La., Alexandria.—Levee.—Red River, Atchafalaya and Boeuf Levee District, E. G. Richard, president, will construct Simmsport to Atkins Bayou levee on left bank of Atchafalaya River in Avoyelles and St. Landry parishes; new levee and enlargement; contents 1,000,000 cubic yards; deposit \$2000; bids received until July 17 at

office of Board of State Engineers, 213 New Orleans Court Bldg., New Orleans, La. (See "Machinery Wanted.")

La., Port Allen.—Levee.—Board of Commissioners Atchafalaya Basin Levee District, V. M. Lefebvre, president, will construct Port Barre South levee on right bank of Atchafalaya River; new levee; contents 1,000,000 cubic yards; bids received until August 8 at office of Board of State Engineers, 213 New Orleans Court Bldg., New Orleans, La. (See "Machinery Wanted.")

La., Port Allen.—Levee.—Board of Commissioners Atchafalaya Basin Levee District will construct following work on right bank of Atchafalaya River: Melville to Krantz Springs levee, enlargement, contents 750,000 cubic yards, deposit \$2000; Latache South levee, enlargement, contents 100,000 cubic yards, deposit \$350; bids received until July 17 at office of Board of State Engineers, 213 New Orleans Court Bldg., New Orleans, La.; V. M. Lefebvre, president. (See "Machinery Wanted.")

Md., Baltimore.—Piers.—Department of Public Improvements, Superintendent of Harbor Board, Oscar F. Lackey, Harbor Engineer, will make repairs to pier at foot of Caroline St.; bids received at office of Richard Gwinn, City Register, City Hall, on or before July 23. (See "Machinery Wanted.")

Md., Baltimore.—Recreation Pier.—Proposals received for furnishing and erecting superstructure for commercial and recreation pier, Thames St., foot of Broadway, including plumbing, heating, wiring and all other mechanical equipment; bids sealed, addressed to Board of Awards, and left with Richard Gwinn, City Register, at his office in City Hall on or before 11 o'clock July 30; bids accompanied by certified check for \$2500; drawings and specifications at office Inspector of Buildings on and after July 16. (H. retorefore mentioned.)

Mo., Kansas City.—National Electric Construction Co., capital stock \$5000, incorporated by H. P. Fisher, R. O. Wing and J. M. Deacy.

Mo., St. Louis.—Swimming Pool.—Mannion's Park Swimming Pool Co., capital stock \$6000, incorporated by William Ruprecht, Fred Voirel and Edward Mannion.

S. C., Georgetown.—Coal Dock.—Waccamaw Line, D. M. Burroughs, president, will construct coaling dock.

Tenn., Henderson.—Levee.—Quarterly Court of Chester County voted to construct two levees across Jacks Creek.

Tex., Clarksville.—Levee.—John Kunkel is inviting bids for construction of 2.6 miles of levee, containing 40,000 cubic yards, about eight miles south of Clarksville on Cuthland creek; J. B. Johnson Engineering Co., Sherman, Tex., engineer.

Tex., Greenville.—Levee.—City will construct concrete levee around electric light, power plant and water-works plant. R. M. Chapman, Mayor.

MISCELLANEOUS ENTERPRISES

Ky., Covington.—Laundry.—Acme Laundry Co., capital stock \$10,000, incorporated by C. H. Wolterling, H. D. Karl and Frank Wolterling.

Ky., Paris.—Seed Cleaning.—E. F. Spears & Sons have not completed plans for erecting plant to replace burned plant; architect not selected. (Recently noted.)

Md., Baltimore.—Transfer.—Christian Mutschler Transfer Co., capital stock \$10,000, incorporated by Christian Mutschler, 104 Stewart Bldg., and others.

Mo., Kansas City.—Engineering.—Lowry Engineering Co. incorporated by W. M. Lowry, H. C. Henrici and J. H. Kent.

Mo., St. Louis.—Printing.—Coppon Printing Co., capital stock \$12,000, incorporated; J. Boyle Price, president; James G. Robertson, vice-president; W. M. Price, secretary-treasurer; will operate plant to print coupon books, street railway transfers, etc.; install machinery; temporary address, 1212 Chemical Bldg. (See "Machinery Wanted.")

Mo., St. Louis.—Equipment.—Harry Benjamin Equipment Co., capital stock \$50,000, incorporated by Harry Benjamin, I. Folger and H. J. Keiner.

N. C., Hickory.—Engineers.—Curtis & Thornton Company (Robert W. Curtis and Marcellus E. Thornton) organized to engineer and contract to build steel bridges, all classes of structural steel work and reinforced concrete substructures, etc.; offices in Thornton Bldg.

N. C., Spray.—Steam Laundry.—R. P. Ray is interested in installation of steam laundry plant to accommodate population of 5000 to 10,000. (See "Ice and Cold-Storage Plants" and "Machinery Wanted.")

Okl., Bartlesville.—Incinerator.—City defeated \$7500 bonds for incinerator plant; C. A. Samm, Mayor. (Latest noted.)

Okl., Hugo.—Steam Laundry.—Hugo Steam Laundry, capital stock \$10,000, incorporated by J. W. Dawley, R. V. Womack, Geo. W. Chandler and others.

Okl., McAlester.—Laundry, etc.—White Swan Laundry Co., 328 E. Choctaw St., invites bids to erect laundry and cleaning plant; 60x100 feet; two stories; brick; also boiler-room, etc.; proposals may be addressed to J. Read Moore; E. E. Grimes, engineer in charge; cost of machinery (practically purchased) \$10,000. (Recently noted.)

Okl., Oklahoma City.—Grain Elevator.—E. W. Wales & Co. awarded contract to erect grain elevator, etc. (See "Flour, Feed and Meal Mills.")

S. C., Clinton.—Engraving.—Jacob Engraving Co. incorporated by J. F. Jacob, C. E. Duckett, W. L. Moore and J. P. Moore.

S. C., Winnsboro.—Publishing.—News and Herald Co., capital stock \$5000, incorporated with T. H. Ketchin, president; E. C. Withers, vice-president, and W. D. Douglas, treasurer.

Tenn., Chattanooga.—Engraving.—Dow Engraving Co., capital stock \$10,000, incorporated by S. Russell Dow, J. S. Fletcher, G. C. Bulmahn and others.

Tenn., Memphis.—Engraving.—J. E. Catlin Company, capital stock \$12,000, incorporated by H. W. Patterson, J. E. Catlin, W. G. Trimble and others.

Tenn., Memphis.—Cut Stone.—Memphis Cut Stone Co., capital stock \$5000, incorporated by J. L. Higgins, J. E. Condra, W. E. Higgins and others.

Tenn., Nashville.—Transmission.—Williams Automatic Transmission Co., capital stock \$100,000, incorporated by Benjamin S. Williams, James S. Frazier, P. H. Cain and others.

W. Va., Wheeling.—Abattoir.—Wheeling Butchers' Association will expend about \$15,000 for improvements and additional machinery to plant on 4th St.; will remodel plant; contract awarded to C. H. A. Wannenwetsch & Co.; equipment to include sanitary rendering tanks, pumps and engines.

MISCELLANEOUS FACTORIES

Ala., Birmingham.—Gin Specialties.—Ginners' Specialty Co., capital stock \$5000, incorporated with A. W. Bell, president, and R. C. Davis, secretary-treasurer.

Ala., Montgomery.—Organs and Pianos.—E. E. Forbes Piano Co., J. H. Holcombe, vice-president, Birmingham, Ala., proposes to build factory in 1914; annual capacity 6000 pianos and organs.

D. C., Washington.—Dairy.—Thompson's Dairy, 2912 11th St. N. W., awarded contract to W. A. Kimmel, 1508 Columbia Rd. N. W., Washington, to erect dairy; two stories; cost \$30,000; plans by W. Leon Clark & Co.

D. C., Washington.—Bakery.—L. Theumission, 1790 Columbia Rd. N. W., will erect addition to bakery; cost \$3500.

Fla., Hastings.—Creamery.—East Coast Creamery Co., N. D. Benedict, temporary secretary, will establish creamery; 100 cows; company not fully organized. (Recently noted.)

Ga., Savannah.—Creamery.—C. L. Stahl of Lynchburg, Va., contemplates establishment of creamery.

Ga., Savannah.—Naval Stores.—Carson Naval Stores Co. wires Manufacturers Record: "Meeting to organize rosin and turpentine export company held July 16; capital will be \$1,000,000; charter to be taken in Delaware; organized for profit and not protection."

La., Lake Arthur.—Rice.—E. P. Fox of Jennings, La., and C. E. Laughlin will erect rice mill with daily output 200 barrels of rough rice; cost of plant, equipment and site, \$10,000.

La., Lake Charles.—Sauce.—Pelican Tobacco Pepper Co., capital stock \$10,000, incorporated with David Bloch, president; Henry M. Bloch, vice-president; J. E. Clark, secretary-treasurer; has 10 acres under cultivation in peppers; will erect plant; one vat will have capacity 500 gallons.

Md., Baltimore.—Bakery.—City Baking Co., 500 Equitable Bldg., purchased site on Hanover St. and will erect annex to White branch; 107x120 feet; probably four or five stories; plans not made; architect not selected; Wallace D. White, secretary.

Md., Baltimore.—Drugs.—McCormick & Co., 105 Concord St., purchased building adjoining present plant; will not erect addition recently reported.

Md., Baltimore—Mantels.—Maryland Mantel & Manufacturing Co., capital stock \$25,000, incorporated by Joseph B. Dunn, 500 E. 21st St.; James J. McGrath, 26 N. Milton Ave.; Charles C. Scheidt, 730 E. 41st St., and others.

Md., Whitehall—Paper.—White Hall Paper Manufacturing Co. is planning extensive improvements, to include erection of powerhouse separate from mill and of storage warehouse, also installation of callender rolls, special machinery for treating waste cotton lint for paper manufacture, possibly installation of electrical generating plant and motors, etc. (Previously mentioned.)

Mo., Joplin—Brooms.—Wren Broom Manufacturing Co., capital stock \$5000, incorporated by J. W. Wren, J. G. Starr and F. C. Ralston.

Mo., Kansas City—Medicine.—Dr. Burke Catarrh Remedy Co., capital stock \$10,000, incorporated by Charles J. Burke, C. H. Mann and Harry L. Snediker.

Mo., St. Louis—Beverages.—Scotch Hop Ale Co., capital stock \$10,000, incorporated by E. M. Roberts, L. I. and L. S. Roberts to manufacture beverages.

Mo., St. Louis—Screws.—St. Louis Screw Co. purchased about eight acres of land and will erect factory on Luther, Bulwer, Pittman and Prescott Aves.

Okla., Claremore—Creamery.—A. O. Goldstein is interested in erection of co-operative creamery.

Okla., Okmulgee.—Butler Manufacturing Co., capital stock \$10,000, incorporated by Joseph McClelland, Jess F. McClelland and Charles A. Butler.

Okla., Sapulpa—Glass.—Sapulpa Glass Co., capital stock \$50,000, incorporated by Julius L. Biron, Ernest E. Unger and Anne Laitem.

S. C., Columbia—Trousers.—Abbott Morrison of Waterville, Me., plans to erect plant.

Tenn., Morristown—Currycomb and Brush Combination Brush Co., capital stock \$45,000, incorporated by J. M. Rowe, E. B. Smith, W. H. Huggins and others.

Va., Norfolk—N. Y. S. & S. Manufacturing Co., capital stock \$15,000, incorporated with Louis Wenfield, president, and William Rosen, secretary.

Va., Petersburg—Fireworks.—Virginia Fireworks Co., capital stock \$10,000, incorporated with Need Adams, president; Willie Livesay, secretary.

Va., Petersburg—Sult Cases.—Krell Sult Case Manufacturing Co., capital stock \$10,000, incorporated with Frank Wood, president; B. Krell, secretary.

W. Va., Wheeling—Wheels and Tires.—Schick Wheel & Tire Co., capital stock \$15,000, incorporated by Adolph Schick, J. E. Morgan, D. H. Taylor and others.

W. Va., Mannington—Incandescent Gas Mantles.—Right-Light Co. will manufacture (by contract at present) incandescent gas mantles; probably establish plant later at Mannington; H. R. Williams, president; T. V. Morgan, vice-president; E. D. Conaway, secretary; G. B. McNeely, treasurer. (Recently noted incorporated with \$10,000 capital stock at Marion, W. Va.)

MOTORS AND GARAGES

Ala., Ensley—Garages.—Ensley Motor Co., capital stock \$10,000, incorporated with J. C. Barrett, president; P. W. Craig, vice-president; T. J. Barrett, secretary.

Ky., Carrollton—Automobiles.—Wood Auto & Machine Co., capital stock \$10,000, incorporated by E. A. Wood, P. Monnyhan, E. C. Smith and P. B. Gaines.

La., New Orleans—Garage.—George Keller will erect garage and automobile supply depot on Baronne St.; two stories; brick and concrete; cost \$22,500.

Md., Baltimore—Garage.—Lambert Automobile Co., 101-105 Mt. Royal Ave., is having plans prepared by Edward L. Palmer, Jr., 408 Roland Ave., Roland Park, Md., for addition to garage.

Md., Baltimore—Garage.—E. E. McKenna, 711 Belgian Ave., has plans by A. Schoenlein, 2217 E. Baltimore St., Baltimore, for garage at 803-5-7 Low St.; 57x116 feet; one story; brick; cost \$5000; awarded contract to Cowan Building Co., 106 W. Madison St., Baltimore.

Md., Baltimore—Automobile Trucks, etc.—New Era Auto Co., 207 North St., will remodel building for manufacturing auto truck bodies and rebuilding automobiles; 20x100 feet; three stories.

Md., Baltimore—Garage.—Alex. Brown, 712 Cathedral St., awarded contract to John Waters, 23 E. Center St., Baltimore, for altering stable for garage; reported cost \$6000; plans by Baldwin & Pennington, Professional Bldg., Baltimore.

Mo., Kansas City—Garage.—Dr. W. E. Minor will erect garage and clubhouse at 1020 Oak St., to be leased by Automobile Club; three stories and basement; walls sufficient for four additional stories; 48x126 feet; solid concrete; clubrooms on second floor; basement and other two floors for storage of automobiles; two driving entrances; elevators; cost \$50,000.

Mo., St. Louis—Garage.—Claude Kilpatrick will erect garage at 5183 Portland Pl.; one story; cost \$9000.

N. C., Newbern—Automobiles.—H. W. Steger and F. J. Laughon will erect garage on 2d St.; two stories; 50x110 feet; brick; cement floors; metal ceiling; glass front; hot-water heating; boiler-room at rear of building separated by fire wall of brick from garage; second floor will have rooms for storage and sleeping quarters for chauffeurs.

N. C., Raleigh—Garage.—Vass estate will erect garage on S. Salisbury St.; cost \$4000.

Tenn., Knoxville—Automobile Woodwork.—Frank Buell, Bay City, Mich., states arrangements for establishing enterprise at Knoxville not fully determined. (Mr. Buell and Frank Newell of Bay City, Mich., recently noted under "Lumber Manufacturing Plants" as investigating site for plant.)

Va., Pulaski—Automobiles.—City Auto Corporation, capital stock \$15,000, incorporated with S. M. Lyons, president; W. H. Wysor, vice-president, and R. L. Gardner, secretary.

Va., Pulaski—Garage.—Gardwysot Garage Co. incorporated as City Auto Corporation with \$10,000 capital stock; S. M. Lyons, president; W. H. Wysor, vice-president and general manager; R. L. Gardner, secretary-treasurer. (Recently noted.)

Va., Rock Hill—Automobiles.—J. G. Anderson, president Rock Hill Buggy Co., writes to Manufacturers Record: "We are to experiment a little with automobiles, and may prepare to manufacture them at some future time; we are not going to add to plant, at least for one year."

ROAD AND STREET WORK

Ala., Anniston—Calhoun county awarded contract to Goodrich & Chinkley, Anniston, at \$4000 to construct portion of State-aid road from Piedmont to Jacksonville. (Previously noted.)

Ala., Montgomery.—Board of Revenue of Montgomery County will gravel about four miles Holt's Crossing Rd.; bids received until August 11; specifications obtainable at office of Thomas H. Edwards, County Road Engineer. (See "Machinery Wanted.")

Ala., Opelika.—City will pave portions of Railroad and S. Railroad Ave. and 9th St. with brick pavement, about 30,000 square yards; 8th St. from First Ave. to Ave. B with hazzam compressed brick, about 10,000 square yards; Ave. A from 10th St. to 7th St. with dolerway pavement, about 10,000 square yards; Geneva St. from 8th to Stone St. and from 9th to Geneva St. with concrete, travertine or dolerway pavement, about 12,000 yards; bids received July 23; S. S. Black, City Clerk; J. G. Palmer, Mayor. (See "Machinery Wanted.")

Ala., Sylacauga.—City awarded contract to J. L. Mullarkey, Ensley, Ala., to construct sidewalks on Broadway.

Ark., Helena.—N. A. Bowman of Little Rock, Ark., is chairman of road committee having \$40,000 available for asphalt paving in newly-formed district; E. A. Kingsley, State Highway Engineer, Little Rock, Ark. (State Highway Commission of Little Rock recently noted as making petition to authorize formation of State Highway District No. 1.)

Ark., Little Rock.—Board of Public Works, Harry M. Williams, chairman, will pave Park Ave. from 10th to 16th Sts., and 11th St. from Park Ave. to Wolfe St.; bids received at office of W. H. Lark, secretary, District No. 223, care of Little Rock Railway & Electric Co., until July 22. (See "Machinery Wanted.")

Ark., Paragould.—Green county has \$80,000 available for construction of 20 miles macadam road; E. A. Kingsley, State Highway Engineer, Little Rock, Ark.; date of opening bids not set. (State Highway Commission, Little Rock, Ark., recently noted as having approved organization of State Highway District No. 1.)

Fla., Arcadia.—De Soto County Commissioners have preliminary estimates for road construction; 15.5 vitrified brick surface, 9 feet wide, costing \$83,835; 199 miles marl, 10 feet wide, costing \$410,080; 16 miles graded road, 30 feet wide, costing \$25,050; engineering, inspection, incidentals, etc., costing \$51,895; total, \$570,860.

Fla., Dade City.—Pasco county contem-

plates voting on \$350,000 bonds for constructing 92 miles of hard-surface roads. Address County Commissioners.

Fla., Fort Myers.—Lee County Commissioners will vote on \$300,000 bonds for road construction.

Fla., Jacksonville.—Board of Public Works awarded following contracts for street improvements: At \$1.73 per square yard for 32,508 square yards asphaltic concrete to Atlantic Bitulithic Co., Philadelphia, Pa.; at \$2.43 per square yard for 23,000 square yards vitrified block and at \$2.18 per square yard for 4745 square yards vitrified block to Alabama Paving Co., Birmingham, Ala.; at \$2.09 per square yard for 4862 square yards granitoid pavement to Rudolph R. Blome & Co., Chicago, Ill. (Lately noted.)

Fla., Sarasota.—Board of Public Works awarded \$40,000 paving contract to Georgia Engineering Co., Augusta, Ga.; Manatee county rejected bids for brick paving, and will probably again invite proposals; Georgia corporation was lowest bidder for this work. (Lately noted.)

Fla., Winter Haven.—Polk County Commissioners opened bids for construction of roads; \$13,000 bonds previously issued.

Ky., Bowling Green.—City Council ordered Center St. paved from 7th to 10th St. with Warren county rock asphalt. Address The Mayor.

Ky., Hopkinsville.—City awarded contract to Southern Bitulithic Co., New Orleans, La., for 8000 square yards street pavement at \$1.50 per square yard.

Ky., Lexington.—City will pave portions of Jefferson, Cedar, West 4th, West Short, East Short, South Spring, 2d and Water Sts., under Ordinances Nos. 94, 96, 95, 97, 136, 113, 114, 120, 112, 2931 and 127; asphalt paving (types A, B and C), creosoted wooden block, asphalt block, or vitrified brick; bids received until July 19; J. E. Cassidy Mayor. (See "Machinery Wanted.")

Ky., Louisville.—Board of Public Works receives bids until July 23 for sidewalk improvements to various streets; cost approximately \$2500.

La., Alexandria.—City will vote August 19 on \$40,000 bonds for paving, drainage and enlargement of sewerage system. Address The Mayor.

La., Lafayette.—Police Jury ordered election in Second Ward on August 16 to vote on 3-mill tax for road construction.

Md., Baltimore.—Board of Awards awarded contract at \$73,896.50 to Baltimore Asphalt Block & Tile Co., 231 Courtland St., Baltimore, for paving various streets included in contract No. 62. (Lately noted asking bids.)

Md., Baltimore.—Paving Commission awarded contract at \$15,743 to Patrick Reddington, 321 St. Paul St., Baltimore, for paving with vitrified brick and granite-block various streets, contract No. 66, and recommended that bid of Filbert Paving & Construction Co., 1210 Block St., Baltimore, at \$57,600, for paving various streets with sheet asphalt, contract No. 63, be accepted. (Lately noted as receiving bids.)

Md., Frederick.—Hagerstown & Frederick Railway Co. awarded contract to Charles Kilpp, Frederick, to rebuild South St.

Md., Towson.—Highways Commission of Baltimore County receives bids until August 14 for building section of State-aid highway along Warren Rd. between York Turnpike and Franz Store for distance of 1.39 miles; bids on blank forms obtainable at office of State Roads Commission, Garrett Bldg., Baltimore, Md. (See "Machinery Wanted.")

Miss., Greenwood.—Leflore county has \$150,000 available for building and maintaining permanent roads; amount of work involved, 25 miles; bids opened August 4; A. R. Bew, clerk; Postoffice Department, Washington, D. C., recently noted under Itta Bena, Miss., as having appropriated \$50,000, supplemented by county's appropriation of \$100,000. (See "Machinery Wanted.")

Miss., Hattiesburg.—Highway Commissioners Forrest county wire Manufacturers Record: "Contract awarded to S. A. Gano, Jackson, Miss., at \$54,815 for 16 1/2 miles gravel surface roads." (Lately noted.)

Miss., Magnolia.—Supervisors District No. 1 of Covington county will improve about 37 miles of road; local gravel will be used; concrete may be used in construction of small bridges and large culverts; bids received until August 4; O. W. Conner, president; Navier A. Kramer, engineer, Magnolia, Miss. (See "Machinery Wanted.")

Miss., Tupelo.—Second district of Lee county will grade 36 miles of road; bids received until August 1; L. G. Smith, engineer in charge. (See "Machinery Wanted.")

Mo., Independence.—Jackson County Commissioners awarded contract at 56 cents a yard to Davidson Construction Co., Kansas City, for macadamizing with crushed rock base the Tribble-Holmes-Park-Ruskin School-house Rd.

N. C., Edneyville.—Edneyville township voted \$12,000 bonds for road construction. Address County Commissioners. (See "Machinery Wanted.")

N. C., Mooresville.—Town voted \$55,000 bonds for street improvement, water extension and sewerage. Address Town Commissioners. (Lately noted.)

N. C., Warren.—Warrenton county votes September 16 on \$300,000 bonds for roads. Address Commissioners.

N. C., Wilmington.—New Hanover County Commissioners plan to construct highway connecting Cape Fear and Brunswick rivers; this in connection with construction of two bridges. See "Bridges, Culverts, Viaducts," etc.)

Okla., Okmulgee.—City has \$80,000 available for construction of 33,550 square yards of bituminous concrete pavement and concrete curb and gutter; James G. Lyons, engineer in charge; contract recently noted awarded to Levy & Levy, Muskogee, Okla.

S. C., Anderson.—City will construct 25,000 square yards high-grade paving on Main St. and 75,000 square yards of cheaper grade suitable to resident streets; bids received until July 30; W. H. Shearer, City Engineer. (See "Machinery Wanted.")

S. C., Florence.—Florence county will vote August 5 on \$500,000 bonds for road construction. Address Commissioners.

S. C., Spartanburg.—City voted \$100,000 bonds for street paving and sidewalks. Address The Mayor. (Lately noted.)

Tenn., Chattanooga.—Hamilton County Court named commission, with Charles Watson as chairman, to construct Lookout Mountain Rd.; \$65,000 available.

Tenn., Greenville.—Greene County Pike Commissioners have, it is reported, awarded contract at \$500,000 to Mann Construction Co., Knoxville, Tenn., to construct pike roads; \$500,000 available. Mann Construction Co. wires Manufacturers Record: "Greene county job is about 200 miles macadam roads; \$500,000 contract; contract indefinite on account of delay selling bonds." (Lately noted as receiving bids.)

Tenn., Loudon.—Loudon County Court ordered sale of \$150,000 road bonds to construct concrete highway from Knoxville to Monroe county line and build pike roads.

Tex., Barry.—Road District No. 3 of Navarro county, A. M. Varnell, chairman of board, will construct macadam or pike roads, with necessary concrete culverts, steel bridges, etc. (Bond issue of \$75,000 recently noted voted.)

Tex., Center.—Shelby County Commissioners contemplate voting on \$287,000 road bonds.

Tex., Conroe.—Montgomery county voted \$250,000 bonds for roads in district No. 2. Address Commissioners.

Tex., Rockport.—City will vote on \$155,000 bonds to construct road and causeway across Capano Bay to connect Live Oak Peninsular with Lamar Peninsular. Address The Mayor.

Tex., Tyler.—County voted \$300,000 bonds for constructing sand-clay roads. Address Commissioners. (Lately noted.)

Tex., Waxahachie.—City voted \$35,000 bonds for street paving, water-works and schools. Address The Mayor.

Va., Castletown.—Russell county voted \$150,000 bonds for road construction. Address County Commissioners.

Va., Portsmouth.—Seaboard Air Line Railway awarded contract to Perry W. Ruth & Co., Inc., Norfolk, Va., for paving portion of 1st St.; amount available, \$30,000; V. O. Cassell, City Engineer.

Va., Richmond.—Henrico county will construct following roads: One mile Three-Chopt Rd., macadam, from Seven Pines to Stop 19 (gravel), 4.3 miles; end of Varina Rd. to Dutch Gap Rd. (gravel), 7 mile; New Market Rd., Turkey Island Bridge to Dick Atkins (gravel), 1.95 miles; Varina Rd. from J. H. Rane's to Garnett's Store (gravel), 2.2 miles; bids received until July 22; P. St. J. Wilson, State Highway Engineer, Richmond, Va. (See "Machinery Wanted.")

Va., Staunton.—Augusta county will construct five miles of macadam road between Waynesboro and Hermitage; bids received until July 24; P. St. J. Wilson, State Highway Commissioner, Richmond, Va.; further information on application to C. L. Scott.

Jr., Waynesboro, Va. (See "Machinery Wanted.")

W. Va., Piedmont.—City will grade and pave Dixon St. according to plans on file with Mayor in Council Chamber; bids received until July 26. Address The Mayor. (See "Machinery Wanted.")

W. Va., Warwood.—City voted \$2000 bonds for improvements to streets. Address The Mayor.

SEWER CONSTRUCTION

Ga., Austell.—City is considering bond issue for sewerage and water-works system; engineer not selected. Address Town Clerk.

Ga., Jackson.—City voted \$23,000 bonds for sewer system. Address The Mayor. (Lately noted.)

La., Alexandria.—City will vote August 19 on \$40,000 bonds for enlargement of sewerage system, paving and drainage. Address The Mayor.

La., Shreveport.—Caddo Parish Farm, J. T. Bullen, engineer, plans construction of sewer system and water-works.

Md., Baltimore.—Sewerage Commission, Charles England, chairman, awarded contract at \$12,262 to Whiting-Turner Construction Co., Sexton Bldg., for constructing storm-water sewer, contract No. 29. (Lately noted as asking bids.)

Md., Baltimore.—Sewerage Commission, Charles England, chairman, awarded contract at \$51,183.36 to William H. Thompson Construction Co., Calvert and Read Sts., Baltimore, to construct lateral sewers No. 5, contract No. 117. (Lately noted as asking bids.)

Miss., Senatobia.—Board of Supervisors plans constructing one mile of sanitary sewer from jail and courthouse through business section into Hickahala Creek.

N. C., Dunn.—City awarded contract at \$41,000 to J. B. McCrory Company of Atlanta, Ga., to construct sewer system; about eight miles of piping. (Lately noted as receiving bids.)

N. C., Mooresville.—Town voted \$65,000 bonds for sewerage, street improvements and waterworks extension. Address Town Commissioners. (Lately noted.)

Okla., Durant.—City's plans for extension to sewer system, recently noted, consist of sanitary mains and laterals, including necessary manholes, lampholes, flush tanks, etc., according to plans and specifications on file in office of City Clerk; bids received until July 18; W. P. Danford, City Engineer; Benham Engineering Co., engineer, 436 American National Bank Bldg., Oklahoma City, Okla. (See "Machinery Wanted.")

Okla., Henryetta.—City awarded contract at \$24,886 to Benham Engineering Co., 435-7 American National Bank Bldg., Oklahoma City, Okla., to construct sanitary sewers. (Lately noted as receiving bids.)

Tenn., Chattanooga.—Commissioners of Department of Streets and Sewers, A. N. Sloan, Commissioner, will construct certain sewers in Tenth Ward; bids received until July 21. (See "Machinery Wanted.")

Tenn., Park City, Station Knoxville.—City awarded contract to J. A. Ahler Plumbing Co., Knoxville, to construct 8, 10 and 12-inch tile sewer pipe; cost \$10,000; cost of disposal plant \$1000; machinery contracts awarded to American Wells Works Co., St. Louis, Mo.; Mr. Thomas of Fountain City, Knoxville, engineer in charge. (Recently noted.)

Tex., Houston.—City awarded contract for following storm-water sewers: To Collins Plumbing Co., Houston, at \$25,898.28, for Dallas Ave. sewer, and at \$22,961.12 for Bell Ave. sewer; to Horton & Son, Houston, at \$11,721.70, for Rusk Ave. sewer; city rejected bids for construction of McGowan Ave. lateral. (Lately noted.)

Tex., Weatherford.—City voted \$4000 bonds for sewer extension. Address The Mayor. (Lately noted.)

Va., Appalachia.—City will construct house sewer system, for which bonds were previously noted voted; to include 200 linear feet 10-inch, 3900 linear feet 8-inch and 24,000 feet 6-inch tile pipe, together with necessary connections, specials, manholes, excavation, etc.; bids opened August 19; E. A. Collins, Recorder. (See "Machinery Wanted.")

TELEPHONE SYSTEMS

Ga., Savannah.—Southern Bell Telephone & Telegraph Co. (main office Atlanta, Ga.) purchased property on Drayton St. and Congress lane and will, it is reported, erect office and exchange building or enlarge present one.

Md., Baltimore.—Chesapeake & Potomac Telephone Co. of Baltimore increased capi-

tal stock from \$10,000 to \$10,000,000; this action separates corporation financially from Chesapeake & Potomac Telephone Co. of New York; extensions and improvements completed.

Mo., St. Louis.—Southwestern Telegraph & Telephone Co. will erect exchange building on Wilmington road.

Okla., Fairview.—Holland Springs Telephone Co. incorporated by W. D. Ross, S. C. Colby, J. E. Davison and others.

S. C., Branchville.—Cattle Creek Telephone Co. incorporated with H. C. Thompson president, G. W. Wimberly vice-president, D. S. Thompson secretary.

Tex., Dallas.—Dallas Automatic Telephone Co. made application to increase bonds from \$750,000 to \$1,000,000 for improvements and extension to system.

W. Va., Huntington.—Chesapeake & Potomac Telephone Co. of Virginia will expend \$75,000 for extensions and improvements to system; P. G. Burton, chief engineer, 5 Light St., Baltimore, Md. (Recently noted issuing \$5,000,000 bonds, etc.)

TEXTILE MILLS

Miss., Columbus.—Sheetings, etc.—Tombigbee Cotton Mills will add 60 automatic looms and make improvements.

Mo., St. Louis.—Rubberized Cloth.—Amazon Rubber Co., capital stock \$100,000, incorporated by W. H. Schewe, A. Petersen and others; installing machinery to manufacture rubberized cloth; office and plant at Wabash Railway and Switzer Ave.

N. C., Taylorsville.—Cotton Goods.—Watts Manufacturing Co. plans to add 6000 spindles and cone winders; has awarded contract for 2000 spindles and conditional contract for another 2000; later will award another contract.

N. C., Lawndale.—Cordage, etc.—Cleveland Mill & Power Co. will build two-story 185x75-foot brick building for dyehouse; recently completed addition for twisting and ball winding.

Okla., Idabel.—Cotton Goods.—Idabel Cotton Mill Co., capital stock \$50,000, incorporated by Walter L. Neldemier, G. E. Dean and Wm. Mendenhall.

S. C., Cowpens.—Sheetings, etc.—Cowpens Manufacturing Co. will install three finisher pickers; recently completed addition to picker-room.

S. C., Darlington.—Shirtings, etc.—Darlington Manufacturing Co. will, it is reported, replace its fancy and dobby looms with automatic looms for plain cloth.

Tenn., Chattanooga.—Aseptic Cotton.—Southern Aseptic Cotton Co. writes to Manufacturers Record: "Our improvements will not be made as early as we contemplated some time ago; but we will more than double our capacity and install, in connection with present plant, bleachery for general bleaching and dyeing; cost approximately \$200,000." (Recently mentioned.)

WATER-POWER DEVELOPMENTS

W. Va., Huntington.—Tri-State Power & Milling Co., O. L. Stearns of Salem, Va., president, applied to Public Service Commission for permit to condemn land and construct dam on New River below Anderson Falls. In Summers county contemplates dam 80 feet high, 98 feet wide, with wall 900 feet long at crest, built of cyclopean masonry and containing 39,000 cubic yards masonry estimated to develop 65,000 horse-power; dam to flood 276 acres, impounding 34,812,000 gallons water; backing up water 20 miles to "The Narrows" in Virginia. (Previously reported incorporated with \$600,000 capital stock, etc.; plans to transmit electricity in West Virginia, Kentucky and Ohio.)

WATER-WORKS

Ark., Little Rock.—City contemplates municipal water-works and pure water supply for Little Rock, Argenta and Pulaski Heights; may construct plant or may purchase Arkansas Water Co.; possible appropriation \$5,000,000. Address The Mayor.

Fla., Daytona Beach.—Town will vote July 21 on \$30,000 bonds for water-works. Address The Mayor.

Ga., Austell.—City is considering bond issue for water-works and sewerage system; engineer not selected. Address Town Clerk.

La., Marksville.—City, T. T. Fields, Mayor, voted tax to construct water-works. (Lately noted as considering \$30,000 bonds for water-works and electric-light plant.)

La., Shreveport.—Caddo Parish Farm, J. T. Bullen, engineer, plans construction of water-works and sewer system.

La., Thibodeaux.—City is considering plan to construct system to pipe water from Mississippi River at Donaldsonville, distance about 15 miles. Address The Mayor.

Mo., Ellsinore.—McDonald Charcoal Iron Co. plans to construct water-works.

Mo., Joplin.—F. C. Bryant of Chicago, Ill., has petitioned city for franchise to establish water-works.

Mo., St. Louis.—Board of Public Improvements awarded contract to Fruin-Conlon Contracting Co., St. Louis, to construct intake tower, tunnel and screening chamber at Chain of Rocks pumping station; require half mile 8-foot drains; E. E. Vall, engineer in charge; amount to be expended, \$500,000. (Lately noted as receiving bids.)

N. C., Mooresville.—Town voted \$65,000 bonds for water extension, street improvements and sewerage. Address Town Commissioners. (Lately noted.)

Tenn., Athens.—Athens Water Co. will remodel reservoir; construct addition of five feet to walls of tank, increasing capacity from 156,000 to 312,000 gallons of water; within next six months contemplates development of new wells and installing pumping station.

Tenn., Knoxville.—City Commissioners will improve water-works system; construct four concrete sedimentation basins, doubling capacity of present one; will also construct additional filtration tubs at once; next year eight old tubs will be removed and four concrete basins will be erected; following year 10 are to be removed and four more concrete basins installed; improvements planned this year will increase capacity about 3,000,000 gallons daily and cost \$30,000 to \$35,000; John Durham, chief engineer.

Tenn., Nashville.—Board of Public Works will expend \$16,000 to lay 12-inch water main from reservoir to Hillsboro Pike; \$30,000 appropriation available for reservoir emergency.

Tex., Bay City.—City authorized purchase of four miles of additional water main for extension of water-works system. Address Mayor Sutherland.

Tex., Belton.—City will lay water mains in business portion of city, erect brick building for pumps and install additional fire hydrants; cost \$30,000; date of opening bids not set; Neal Bassel, Mayor. (Bond issue recently noted voted.)

Tex., Commerce.—City contemplates installation of water-works and electric-light plant; cost approximately \$10,000. Address The Mayor.

Tex., Dallas.—Sears-Roebuck Company, main office, Chicago, Ill., requested Board of Commissioners to install 10-inch water main to new buildings in South Dallas; cost estimated at \$6500; company will install engine.

Tex., Marble Falls.—City contemplates installation of water-works and light plant. Address The Mayor.

Tex., Moulton.—Moulton Water-Works Co., capital stock \$10,000, incorporated by F. T. Fehrenkamp, A. F. Kotzebue, J. G. Guenther and others.

Tex., Spur.—City will expend \$23,000 to construct water-works; 120,000 gallons per 10-hour capacity; erect pump-house; concrete; install 25 horse-power electric motor, 200 gallon per minute capacity pump; also construct 50,000-gallon reservoir and tower; Jeff D. Reagan of Spur, engineer in charge; Oscar Jackson, secretary. (Recently noted to receive bids until July 15.)

Tex., Waxahachie.—City voted \$35,000 bonds for water-works, street improvements and school; \$22,500 of this amount for water-works. Address The Mayor.

W. Va., Barboursville.—City voted \$12,500 bonds for water-works. Address The Mayor. (Lately noted.)

WOODWORKING PLANTS

Ark., Des Arc—Veneer.—Des Arc Veneer Lumber Co. organized with G. W. Sparks of Duvall's Bluff, Ark., president, to construct veneer mill.

Ark., Searcy—Veneer.—J. W. Conner of Robers & Conner, New Albany, Ind., will erect veneer factory.

Ark., White County—Veneer.—Roberts-Conner Veneer Co., New Albany, Ind., acquired \$50 acres timber land in White county and will erect branch veneer mill.

Little Rock—Furniture, etc.—L. J. Menton has closed lease with Arkansas Upholstering & Cabinet Co. for one-story building 75x140 feet at 4th and Center Sts.; for manufacturing furniture, screen doors, cabinet work, etc.

Md., Baltimore.—Furniture.—Maryland Fur-

niture Co., 1621 Thames St., has invited Monnomler & Sorrell, 1711 McCulloh St., and Horace S. Ford, 619 N. Fremont Ave., both of Baltimore, to bid on construction of plant at 1621-23 Thames St.; four stories; slag roof; electric elevator; plans by Henry J. Tinley, 31 N. Charles St., Baltimore. (Lately noted.)

Md., Havre de Grace—Boxes, etc.—William E. Venable (recently noted as to have purchased site of Delmar Lumber Co.'s plant) will erect factory for boxes and cases; 85x150 feet; building frame and brick or iron; daily capacity 4000 to 6000 boxes and cases; also install 25-ton ice plant. (See "Machinery Wanted.")

Miss., Meridian.—Hardwood.—Usher Bros. have plans for \$25,000 hardwood mill.

Tenn., Nashville.—Hardwood.—Cherokee Lumber Co. changed name to Farris Hardwood Lumber Co. and increased capital stock from \$40,000 to \$75,000.

Tex., Beaumont.—Hardwood.—Beaumont Hardwood Manufacturing Co., capital stock \$50,000, incorporated by M. Gulterman, H. A. Perlestein and Lip Norvell.

BURNED

Ala., Birmingham.—Birmingham Grain Co.'s building at Ave. B and 14th St. damaged; loss \$15,000.

Ala., Clayton.—City power-house and electric-light plant; loss \$15,000. Address The Mayor.

Ala., Montgomery.—Vandiver Planting & Canning Co.'s plant, six miles from Montgomery, owned by Mrs. Sallie P. Vandiver; loss \$8000.

Ala., Pollard.—Lindsey Lumber Co.'s plant; loss \$100,000.

Ark., Harrison.—George O'Neal's building, loss \$35,000; Ozark Wholesale Grocery Co.'s store, loss \$25,000; Presbyterian church, loss \$6000. (Address The Pastor, Presbyterian Church.)

Ark., Spadra.—Spadra Creek Coal Co.'s tipple; loss \$75,000; general office at Clarks-ville, Ark.

D. C., Washington.—Washington Wholesale Drug Exchange, 459 C St. N. W.; loss on building \$20,000.

Fla., Key West.—Memorial Church, Rev. Wm. T. Morgan, pastor.

Fla., Santa Rosa.—Gulf Lumber Co.'s saw and planing mills; loss \$50,000; also Cessna Bros.' warehouse.

Ga., Augusta.—Silver Five and Ten-Cent Store; loss \$45,000; building owned by Dr. W. W. Bussey.

Ga., Columbus.—Two residences at 734 and 736 First Ave., owned by Ed. C. Sauls and H. L. Woodruff; loss \$7500 each.

Ga., Oconee.—C. M. Hodges' sawmill near Oconee; loss \$2000.

Ga., Statesville.—Miller Trading Co.'s store; loss \$4000.

Ga., Vidalia.—J. Herman McColskey's residence; loss \$3000.

Ky., Bowling Green.—Louisville & Nashville Railroad's passenger station, W. H. Courtenay, chief engineer, Louisville, Ky.; loss several thousand dollars.

Ky., Columbia.—Ruel Hutchison's residence.

Ky., Danville.—Granville Cecil's barn containing feed, machinery, etc.; loss \$10,000.

Ky., Haden'sville.—Barn owned by W. Mansfield Kirby of Bowling Green, Ky.; loss \$7000.

Ky., Sturgis.—Sturgis Dry Goods Co.'s store, loss \$15,000; Segreaves Drug Co.'s store, loss \$15,000; First National Bank, loss \$1500; Bank of Sturgis, loss \$30,000; Independent Order of Odd Fellows' building, loss \$10,000; George Simpson Grocery Co.'s building, loss \$10,000; Machen & King Drug Co.'s store, loss \$10,000; Pruitt Grocery & Hardware Co.'s store, loss \$20,000; Young Men's Christian Association Building, loss \$12,000; Dodd & Onan Hardware & Furniture Co.'s store, loss \$6000; Sturgis Grocery Co.'s store, loss \$5000; Shipley Grocery Co.'s store, loss \$4000; C. E. Bradburn's grocery store, loss \$8000.

La., Chestnut.—Farmers' Mercantile Co.'s store; loss \$5000.

La., Independence.—Illinois Central Railroad depot, A. B. Baldwin, chief engineer, Chicago, Ill.; Klotz Hotel, loss \$4000; Simon Grechman's store, loss \$12,000; A. Kluchin's store, loss \$22,000; A. Stevens' two houses; David Sciro's store and residence; George Palamo's moving-picture theater, hall and skating rink; A. Heik's residence and store, loss \$16,000; T. Robinson's drug store; Pete Lavite's store; George Palamo's store and butcher shop; Sam Lupo's building and

store; Joe Dello's store; Dr. Newman's residence, loss \$4000; J. Conwell's livery stable; John Endy's residence; Italian Hall; W. E. Henderson's residence; Mrs. Jane Starnes' residence; Joe Robinson's residence; T. A. Robinson's residence; Ivy Stafford's residence; Mrs. Fannie Cason's residence; H. Everett's residence; Ode Herring's two houses; Calvin Westholz's hotel; Richardson & Kemp's law offices; American Fruit Growers' Association's offices; J. W. Tyler's residence and store, loss \$4000; Sam and Joe Dibuong's barber shop; total loss \$300,000.

Md., Federalsburg. — Webster Kinder's barn; loss \$10,000.

Md., Trappe. — Percy M. Marvel's residence.

Miss., Clarksdale. — Crystal Palace store building; loss \$4000.

Miss., Ellisville. — Odom Lumber Co.'s sawmill, six miles from Ellisville; loss \$10,000.

Mo., Ash Grove. — Ash Grove Opera-house and five other buildings; loss \$25,000.

Mo., Randles. — Tom Beardsley's sawmill.

N. C., Wanaish. — Council Tool Co.'s plant; loss \$5000.

St. Louis. — Lemp Brewing Co.'s washhouse at 13th and Potomac Sts. damaged; loss \$5000.

S. C., Lancaster. — John P. Hunter's store building, occupied by Grover C. Dees; loss \$4500.

S. C., Greenwood. — Peter McKellar's gin-house; loss \$3500.

Tenn., Chattanooga. — M. A. Timothy's dwelling at 121 E. Terrace St.

Tenn., Clarksville. — A. M. Leach's residence on Madison Blvd.; loss about \$7500.

Tenn., Knoxville. — Pryor Brown & Son's stable at Church Ave. and Prince St.; loss on building \$10,000.

Tenn., Louisville. — Allen Clagett's stove mill.

Tenn., Pinewood. — McCaslin Bros.' sawmill near Pinewood.

Tenn., South Pittsburg. — Roy Gilliam's grist mill; loss between \$5000 and \$10,000.

Tenn., Spring Hill. — Fenton Campbell's stable; Buckner, Short & Greenlaw's stable; loss about \$4000.

Tenn., Tullahoma. — W. M. Bearden's residence; W. R. Marshall's residence; Sam Woolsey's residence.

Tex., Amarillo. — Charles J. E. Lowndes' residence; loss \$3000.

Tex., Burton. — Burton Bulletin publishing plant; loss \$3500.

Tex., Navasota. — Cohen Hotel and annex and Mr. Beach's residence, buildings owned by Mrs. Cohen and Mrs. Schaeffer; total loss \$15,000.

Tex., Plainview. — Daniel M. Garrison's residence; loss \$9000.

Tex., Temple. — C. H. Cox & Co.'s store at 220 S. Main St.; loss \$20,000.

Tex., Taylor. — R. B. Spencer & Co.'s lumber yard, office and stock, loss \$30,000; Mrs. M. A. Griffith's cottage; G. E. King's feed storeroom.

Va., Holland. — I. A. Luke's residence, Dr. Job Holland's residence; total loss \$12,000.

Va., Konbridge. — Blackwell & Hatchett's two storage and sales houses; Farmers' Co-operative Guano Co.'s factory; total loss \$15,000.

Va., Phoebus. — Home Brewery on Mallory St., building owned by Moses Miller; loss \$6000.

W. Va., Palmer. — Sawmill and powerhouse owned by John T. McGraw of Grafton, W. Va., and leased by Hollywood Lumber Co.

and mahogany counter, etc.; will place concrete foundation under structure and make building three stories; install vaults, etc.; Lloyd C. Culler, Frederick, will superintend construction; day labor. (Recently noted to have awarded contract to Mosler Safe Co. for vault 7x10 feet.)

Miss., Biloxi. — D. J. Gay will erect store and office building. (See "Stores.")

Miss., Laurel. — Laurel Light & Railroad Co. will erect six-story office building. S. M. Jones and F. M. Meek are interested.

N. C., Goldsboro. — F. K. J. L. and E. B. Borden, Jr., have plans, it is reported, for building; steel and concrete; fireproof construction.

N. C., Lenoir. — E. L. Steele and J. L. Cottrell will erect store and office building (See "Stores.")

S. C., Sumter. — First National Bank will erect bank building; cost \$20,000 to \$25,000; architect not employed. (Recently noted.)

Tenn., Maryville. — Bank of Maryville will erect bank building; A. K. Harper, D. F. Young, R. P. McReynolds and J. A. Cox, building committee.

Tex., El Paso. — Union Bank & Trust Co. has plans by Trost & Trost, El Paso, for bank and office building; two stories; terra-cotta exterior finish; construction to permit erection of eight additional stories later.

Tex., Wadsworth. — Bank is being organized by T. J. Poole, Hy. Rugeley, J. W. Gaines of Bay City, Tex., and others with \$15,000 capital stock; will erect two-story brick building.

Tex., Westhoff. — First State Bank of Westhoff has plans by J. Henry Yentzen, Yoakum, Tex., for bank building; 25x70 feet; fireproof construction; cost \$8000; contract not awarded as recently reported.

W. Va., Parkersburg. — Parkersburg National Bank will expend \$16,000 to erect bank building; 22x130 feet; details not completed. (Recently noted.)

Rock Hill, S. C., for building; two stories; cost \$10,000; day labor. (Recently noted.)

S. C., Johnston. — Harmony Methodist Episcopal Church, Rev. Edward H. Beekham, pastor, is receiving bids to erect building; seating capacity, 500; ordinary construction; steam heat; electric lighting; slate roof; cost \$12,000; plans by Hamby & Rorke, Columbia, S. C. (Recently noted.)

Tenn., Chattanooga. — Whiteside Street Methodist Episcopal Church South, Rev. J. E. Wolfe, pastor, will erect building; C. R. Wallace, president of lot committee.

Tenn., Rockwood. — Christian church has plans by Snoddy & Bull, 815 James Bldg., Chattanooga, Tenn., to remodel building; steam heat; cost \$6000; contract let in two weeks.

Va., Richmond. — Trustees of Mt. Calvary Cemetery will erect chapel and monument to cost \$11,755; furnishings and ornaments to cost \$5000.

CITY AND COUNTY

Ala., Birmingham. — Jail. — City will expend about \$3000 for jail repairs, including strong bars on windows, floors, screens, cell furniture, etc. Address Culpeper Exum, president of City Commissioners.

Ark., Helena. — Jail. — Phillips county, E. P. Molitor, County Judge, appointed F. F. Kitchen, commissioner, to build courthouse and jail. (See "Courthouses.")

Ga., Atlanta. — Refreshment. — Park Board, J. O. Cochran, president, will probably erect refreshment stand to replace structure in Grant Park reported burned; concrete construction.

Ga., Fitzgerald. — Jail. — Ben Hill County Commissioners, Wesley R. Walker, chairman, R. L. Kink, clerk, will receive bids until August 12 to erect two cells in county jail; plans and specifications at office of clerk at his office in the courthouse, Fitzgerald.

La., DelRidder. — Jail. — Police Jury of Beauregard parish will receive bids until August 11 to erect two-story-and-attic reinforced concrete jail in accordance with plans and specifications by Stevens & Nelson Company, architects, second floor Liverpool & London & Globe Annex, New Orleans, La., from whom plans, etc., are obtainable; bids to be addressed to J. D. Robertson, president Police Jury. (Recently noted.)

La., Shreveport. — Reformatory. — Board of Control of Caddo Parish Farm will erect reformatory.

N. C., Charlotte. — Jail. — Mecklenburg county is considering \$110,000 bond issue, to include \$75,000 to erect jail; three stories; fireproof; steam heat; electric lighting; electric elevator; tar and gravel roof; cost \$65,000; plans by Bellowby & Whaley, Augusta, Ga.; W. M. Long, chairman of committee.

N. C., East Spencer. — Municipal. — Town will erect municipal building and city jail. Address Mayor Sides.

N. C., Raleigh. — Home. — Wake county is having plans prepared for home on site two miles from Raleigh; two stories; concrete and brick; accommodations for 100 inmates and special isolated quarters for tubercular inmates. Address County Commissioners.

S. C., Columbia. — Jail. — Richland county will expend \$50,000 to erect fireproof jail; to include cellhouse, steel cells, hospital and barber shop; steam heat; electric lighting; plans by Hamby & Rorke, Columbia. (Recently noted.)

Tex., Angleton. — Jail. — J. W. Munson, Brazoria County Judge, will receive bids until July 21 to erect jail building; bids received for building and cells jointly or separately; plans and specifications at office of County Judge at Angleton, and Tom E. Bergin, architect, Sinton, Tex.

Va., Richmond. — Jail. — Administrative Board recommended to City Council appropriation of \$6000 for repairs to city jail. Address The Mayor.

Va., Richmond. — Market. — Administrative Board directed Carnel & Johnston, Richmond to proceed with plans for temporary market building on site of Seabrook warehouse. (Previously noted to have awarded contract for erection of permanent market building.)

W. Va., Wayne. — Infirmary. — Wayne County Commissioners rejected all bids to erect infirmary and invite new bids until August 10 through J. R. Gieske, architect, Ceredo, W. Va.; ordinary construction; steam heat; gas lighting; slate and tin roof. (Recently noted.)

COURTHOUSES

Ark., Helena. — Phillips county, E. P. Molitor, County Judge, appointed F. F.

BUILDING NEWS

BUILDINGS PROPOSED

APARTMENT-HOUSES

Ga., Savannah. — A. L. Farie will erect three-story brick apartment-house at 18 Taylor St.

Ga., Savannah. — Thomas F. Davis will erect two two-story frame apartment-houses on 36th St.

La., New Orleans. — A. J. Stallings, Hibernia Bank Bldg., opens bids through F. J. MacDonnell, 820 Hibernia Bldg., New Orleans, July 19 to remodel apartment-house; ordinary construction; hot-water heat; slate roof.

La., New Orleans. — Rosemonde E. Kuntz is having plans prepared by Toledano & Wogan, New Orleans, for two apartment-houses on St. Charles Ave.; two stories; stucco exterior.

Md., Baltimore. — Alston Realty Co. opened bids to erect apartment-house on St. Paul St., near 33d St.; Willard E. Harra Company, 213 N. Calvert St., Baltimore, is lowest bidder for construction; plans by Parker, Thomas & Rice, Union Trust Bldg., Baltimore.

Mo., Kansas City. — H. A. Bailey will erect four four-apartment flats at 3220-32 E. 8th St.; two stories; brick and stone; cost \$10,000 each; plans by Otis Goddard, Kansas City.

Mo., St. Louis. — Gustave Klein will erect two-story tenement-house at 3316 Louisiana Ave.; cost \$3400.

Mo., St. Louis. — Francis Wyland Realty & Building Co. has plans by W. H. Mills, St. Louis, for apartment-house on Clara Ave.; two buildings with automobile driveway and sunken garden between; cost \$85,000; construction by owner.

Mo., St. Louis. — Julius Bernacchi will erect store and apartment building.

Mo., St. Louis. — J. M. Rohlfing will erect two-story tenement-house at 4219 Red Bud St.; cost \$4300.

Mo., St. Louis. — F. A. Temme will erect two-story apartment-house at 3845-47 Potomac St.; cost \$5000.

Mo., St. Louis. — S. Hasgall, president Hasgall Realty & Investment Co., purchased seven lots at Limit and Van Versen Aves. and will erect apartments.

Mo., St. Louis. — Fred W. Kublin will erect four-family apartments of five and six rooms and single two-family apartment of five and six rooms; total cost, \$25,000.

N. C., Raleigh. — Vass estate will erect two brick buildings on South Salisbury St., one

for garage to cost \$4000; other two-story structure for apartments; cost \$6000.

S. C., Columbia. — W. K. Duffie will erect apartment-house at Elmwood Ave. and Marion St.; 90x10 feet; composition shingle roof; cost \$5000.

Tex., El Paso. — Mrs. J. Nagley has plans by Trost & Trost, El Paso, for apartment-house; seven apartments.

Tex., San Antonio. — Mrs. C. A. Sckeris will erect two-story apartment-house on Madison St.; cost \$6000.

Va., Portsmouth. — L. B. Whitley and associates of Courtland Corporation acquired Virginia Apartments on Court St. and will remodel at cost of about \$8000; plans by C. M. Major, Portsmouth, call for overhauling electrical and heating equipment, installation of tile in baths and kitchens, tile or marble in main hallway, construction of concrete and brick porches on first and second floor front and frame porch on third floor; will change name to The Courtland.

ASSOCIATION AND FRATERNAL

Ky., Frankfort. — Proposals received by Robert L. Cowan, secretary Young Men's Christian Association, until July 25 for underpinning and repairs to building; plans and specifications in office of S. F. Greelous, civil engineer, 403 Equitable Bldg., Louisville, Ky., and may be secured on deposit of \$5.

Tex., El Paso. — Benevolent and Protective Order of Elks, Lodge No. 187, will erect building; 75x120 feet; fireproof construction; cost \$150,000.

BANK AND OFFICE

Fla., Orlando. — James L. Giles and C. A. Hovey have plans for office and store building. (See "Stores.")

La., Independence. — Farmers & Merchants' Bank will erect bank building to replace structure reported burned.

Md., Baltimore. — Loyola Perpetual Building Association, 713 Calvert St., purchased building at southeast corner of Charles and Preston Sts. and will remodel for banking purposes.

Md., Frederick. — Frederick Trust Co., Reno S. Harp, president, is having plans prepared by B. Evard Kepner, Frederick, for improvements to building at Market and 3d Sts., to include front of cream-colored brick and brown terra-cotta, ceiling with mahogany beams and plaster panels, tiled banking room with mahogany wainscoting, marble

Kitchen, commissioner, to arrange details to build courthouse and jail; Mr. Kitchen will have plans prepared at once for structure to cost about \$200,000. (Previously noted.)

Ark., Little Rock.—Pulaski county, Gordon N. Peay, Commissioner of Public Buildings, will receive bids until August 8 for materials and performing work on interior finishings of annex to courthouse under construction and previously noted; plans and specifications at office of George R. Mann, architect, Little Rock.

Ga., Macon.—Representative Wallace Miller introduced a bill in State Legislature authorizing Bibb county to vote on two bond issues of \$500,000 each for courthouse and schools.

N. C., Raleigh.—State Offices.—Hon. J. Y. Joyner will receive bids until July 21 to remodel Supreme Court building for State offices; plans and specifications by and at office of H. P. S. Keller, architect, Raleigh, call for construction of series of fireproof vaults through five floors and other improvements; cost about \$40,000.

DWELLINGS

Ala., Birmingham.—Mrs. Bettie J. Houser will erect two one-story brick-veneer dwellings on Portland Ave.; cost \$5000.

Ala., Decatur.—J. G. Finley purchased site between Louisville & Nashville and Southern Railroad tracks and will erect residence.

Ark., Little Rock.—W. H. Mick will erect two-story bungalow in Young's Park; cost \$5000.

Ark., Little Rock.—R. E. Wiley is having plans prepared by W. M. Holtzman, Jr., Little Rock, for residence at 21st and Gaines Sts.; brick-veneer; tiled roof; cost \$10,000.

Ark., Little Rock.—W. F. Booth, manager of Little Rock Gas & Fuel Co., is having plans prepared by W. M. Holtzman, Jr., Little Rock, for residence in Young's Park addition; cost \$6000.

D. C., Washington.—H. D. Fulmer, 3825 Legation St. N. W., has plans by E. J. Ryerson for two-story frame dwelling at 3905 Morrison St. N. W.; cost \$5000; construction by owner.

D. C., Washington.—Harry A. Kite, 1333 G St. N. W., has plans by A. E. Landvoigt, 1338 G St. N. W., Washington, for four two-story dwellings at 1208-14 C St. S. E.; cost \$8000; construction by owner.

D. C., Washington.—Burgess & Parsons, 700 10th St. N. W., have plans by H. N. Parsons for frame dwelling at 1815 Rhode Island Ave.; cost \$3000; construction by owner.

Ga., Atlanta.—L. W. Granade will erect one-story frame dwelling at 911 E. North St.; cost \$3500; day labor.

Ga., Atlanta.—J. H. Whisenant will erect one-story frame dwelling at 875 E. North Ave.; cost \$3000; day labor.

Ga., Atlanta.—W. F. Dykes will erect residence at Penn Ave. and 4th St.; cost \$6500.

Ga., Atlanta.—Fitzhugh Knox will erect 14 one-story frame dwellings on Hardee, Brantley and Kensington Sts. and Cleland Ave.; cost \$21,000; day labor.

Ga., Savannah.—Ed B. Roberts will erect two-story frame residence on Gwinnett St.

Ga., Savannah.—I. and H. Lemneon will erect two-story frame residence on 39th St.

Ga., Savannah.—M. O. Seckinger will erect two-story frame residence on Brady St.

Ga., Savannah.—P. R. Cohen will erect two-story frame residence on 39th St.

Ky., Louisville.—L. Jacobson will erect two frame cottages on 35th St.; cost \$3000.

Ky., Louisville.—S. S. Hall will erect brick veneer dwelling at 4 Parsons Ct.; cost \$7600.

Ky., Louisville.—Christiana Gerard will erect frame dwelling at 1223 S. Clay St.; cost \$3000.

Ky., Louisville.—C. E. Boswell will erect two frame cottages at 2614 and 2616 Bismarck St.; cost \$3850.

Ky., Louisville.—Malkin & Dugach will erect three residences at 1025-27 Netherwood Ave. and 1589 Southern Ave.; cost \$6000.

Ky., Louisville.—Mrs. M. E. A. Dudley has plans by George Herbert Gray and Hermann Wischmeyer, 708 Louisville Trust Bldg., for residence; 50x100 feet; one story; fireproof; hot-water heat; electric lighting; slate and copper roof; cost \$30,000. (See "Machinery Wanted.")

Ky., Williamsburg.—Charles H. Keeton is having plans prepared to rebuild residence; two stories; brick veneer; metal shingle roof; cost \$3500; cost of heating plant, \$500. (Recently reported burned.)

La., New Orleans.—Charles A. Stevens will erect two-story residence on Coliseum St.

La., New Orleans.—Fred S. Kaufman will erect stucco bungalow on Fontainebleau Drive.

La., New Orleans.—Sidney Menge will erect bungalow in Lakeview.

La., New Orleans.—Howard Cronwell will erect bungalow on Gentilly Terrace.

Md., Baltimore.—Phillip H. Fowler, 1213 Harford Ave., is having plans prepared for bungalow at Chapanoke and Strathmore Aves.

Md., Baltimore.—Jackson Realty Corporation, 512 Equitable Bldg., will erect two two-story concrete dwellings at Garrison and Ridgewood Aves.; 26x34 feet; cost \$7000.

Md., Baltimore.—Miss Julia R. Rogers, Hotel Belvedere, Charles and Chase Sts., purchased site in Guilford and will erect residence.

Md., Baltimore.—Willmer Black, 1109 American Bldg., is having plans prepared for residence on Oaksley Rd., Hill Top Park.

Md., Roland Park.—Mrs. A. S. Bonebrake, 1508 Eutaw Pl., Baltimore, Md., has plans by Clyde N. Fritz, 1523 Munsey Bldg., Baltimore, Md., for residence; two and a half stories; brick; tile roof; steam heat; cost \$10,000; following contractors were invited to estimate: J. Henry Smith, 1426 Light St.; L. L. Chambers, 2074 Woodberry Ave.; E. G. Turner, Bateman Ave.; J. F. Kunkel, 413 King St.; A. F. West, 15 E. Fayette St., all of Baltimore, Md., and Roland Park Co., 408 Roland Ave., Roland Park.

Mo., Ellsinore.—McDonald Charcoal Iron Co. will build dwellings for operatives and officials; engineer in charge, L. W. Searles, Woodward Bldg., Birmingham, Ala. (See "Iron and Steel Plants.")

Mo., St. Louis.—George F. Luem will erect two-story dwelling at 4962 Spalding St.; cost \$3500.

Mo., St. Louis.—George F. Bergfeld Realty Co. will erect four residences in Parkview; three stories; 10 rooms; brick; porches; hot-water heat; hardwood floors; cost \$14,000.

Mo., St. Louis.—Robert and Richard Niedner will erect five California bungalows on Winnebago St.; five rooms; granite porches and steps; electric lights; cost \$2000 to \$3500 each.

Mo., St. Louis.—Adolphus Busch will expend \$4000 to repair dwelling at 1112 Pestalozzi St.

Mo., St. Louis.—Dr. H. J. Kruse will erect 11-room residence.

Mo., St. Louis.—R. P. Horwitz will erect two-story dwelling at 5235 Maple St.; cost \$4500.

Mo., St. Louis.—N. A. Howard will erect dwelling at 5331 Pennsylvania St.; cost \$3200.

Mo., St. Louis.—S. Jakoubek will erect two-story dwelling at 4936 Sutherland St.; cost \$4000.

Mo., St. Louis.—American Real Estate, Building & Investment Co., Mary Dittmeyer, president, will erect five brick and tile bungalows on Wells Ave.; one and a half stories; six rooms; tile bathroom; granite cellar; furnace; stone and brick summer porches; cost, including site, \$30,000; construction under direction of Frank L. Dittmeyer, St. Louis.

Mo., St. Louis.—Trade Realty & Building Co. will erect five one-story dwellings at 1910-24 America St. to cost \$5000, three one-story dwellings at 1921-4 Forest St. to cost \$5100, and two-story dwelling at 1920 McCausland St. to cost \$4500.

Mo., St. Louis.—M. Harer will erect two one-story dwellings at 4611-15 Habsburger St.; cost \$3900.

Mo., St. Louis.—George Koos will erect store and dwelling. (See "Stores.")

N. C., Raleigh.—Judge James S. Manning will erect residence on N. Blount St.

N. C., Winston-Salem.—S. A. Daye Company will erect three dwellings on Main St.; two stories; seven rooms; frame; shingle roof; gas and electric lights; cost \$4500.

S. C., Columbia.—C. L. Kibler will erect 11-room dwelling on Pickens St.; cost \$5000.

S. C., Columbia.—Mrs. L. C. Shand will erect eight-room dwelling at Divine and Elliott Sts., Shandon; cost \$3000.

S. C., Columbia.—C. D. Stanley will erect two-story dwelling at 1809 Sumter St.; cost \$3000.

S. C., Columbia.—John W. Lillard will erect 10-room dwelling at 1218 Pickens St.; cost \$7500.

Tenn., Chattanooga.—John Troutt has plans by J. D. Alsop, Chattanooga, for dwelling; 32x60 feet; two stories and base-

ment; stone and frame; steam heat; electric lighting; cost \$8000.

Tenn., Memphis.—W. C. Johnson states he will not erect dwelling for which contract was recently noted awarded.

Tenn., Nashville.—Mrs. E. B. Higgins of Redlands, Cal., it is reported, will erect residence on Belle Meade tract; cost \$75,000.

Tenn., Nashville.—Misses Hood and Heron purchased site in Belle Meade tract and will, it is reported, erect residence.

Tex., Brownwood.—Dr. M. L. Brown of Goldthwaite, Tex., president of Brown Telephone Co., will erect two-story residence on Center St.

Tex., Dallas.—W. R. Lynch will erect two residences at 1602-1606 Pine St.; two stories; eight rooms; frame; cost \$6000.

Tex., Dallas.—F. S. Strong will erect residence at 2514 Grand St.; two stories; eight rooms; frame; cost \$4000.

Tex., Dallas.—James T. Booth will erect two residences at 4502 Swiss St. and 1008 Carroll St.; two stories; 10 rooms; frame; cost \$11,000.

Tex., Dallas.—E. B. Brannon will erect residence at 4507 Worth St.; two stories; eight rooms; frame; cost \$3500.

Tex., Freeport.—S. M. Swenson, it is reported, will erect several residences.

Tex., Houston.—William A. Wilson Company will erect one five-room and one six-room cottage at 2404 Hamilton St. and 4709 Walker St.; cost \$3250.

Tex., Houston.—J. W. Reynolds is having plans prepared by C. D. Hill & Co., Houston, for brick veneer residence at Francis Ave. and Austin St.; two stories; 12 rooms; cost \$30,000.

Tex., San Antonio.—William A. Cooke will erect two-story dwelling on E. Craig Pl.; cost \$4000.

Tex., Waelder.—O. B. Robertson will erect two-story residence; probably brick.

Va., Phoebus.—Mr. Larrabee, Town Recorder, is having plans prepared for residence on Virginia Ave.

Va., Portsmouth.—C. S. Sherman, Jr., advises contract for dwelling has not been awarded as recently reported.

Va., Roanoke.—G. W. Thomas will erect two-story brick-cased dwelling at Seventh Ave. and 7th St. S. W.; cost \$4500.

Va., Roanoke.—James T. Hughes will erect two two-story frame dwellings on Blain St. N. W.; cost \$3000.

W. Va., Gary.—United States Coal & Coke Co. will expend \$100,000 to erect five four-room, 19 three-room, 14 double four-room, three double five-room, three single six-room and two single three-room dwellings, two boarding-houses, addition to clubhouse and assembly hall; ordinary construction; furnaces in six buildings; electric lighting; shingle roofs; plans and construction by company. (Previously noted.)

W. Va., Huntington.—Huntington Home Building Co. organized with C. W. Cammack, president; Jerry Dingsess, secretary-treasurer; E. O. Young, general manager; will erect number of dwellings; five brick dwellings in Trenton Pl. now under construction.

GOVERNMENT AND STATE

D. C., Washington.—Office Building.—House of Representatives, Elliott H. Woods, superintendent, will erect additional story to House office building, for which \$225,000 has been appropriated; will contain 49 offices.

Mo., Farmington.—Hospital.—Chas. R. Pratt, president; W. L. Tomlinson, secretary of board of managers, will receive bids until July 21 for rebuilding and completion of administration building for State Hospital No. 4; plans and specifications at office of secretary at institution and H. H. Hohenschild, architect, 310-11-12 Navarre Bldg., St. Louis, Mo. (Recently noted.)

Md., Cambridge.—Hospital.—State, Phillips Lee Goldsborough, Governor, Union Trust Bldg., Baltimore, Md., receives bids until July 17 to erect Eastern Shore Hospital for Insane; brick; stone trimmings; slate roof; steam heat; electric lights; tile and terrazzo floors; concrete foundation; contractors estimating are D. M. Andrews Company, Mt. Vernon Ave. and 26th St.; Edward Watters & Co., 509 N. Charles St.; E. D. Springer & Co., 424 S. Charles St., all of Baltimore; Irwin & Leighton, Pennock & Co., Henry Brown, all of Philadelphia, Pa.; U. G. Ross & Co., Easton, Md.; Pilchard & Co., Pocomoke City, Md.; Union Stone Co., Wilmington, Del.; W. H. Thomas, Cambridge; plans by Parker, Thomas & Rice, Union Trust Bldg., Baltimore, Md. (Recently noted.)

Okla., Enid.—Institute.—State has plans by Roy Shaw, Enid, for improvements to Feeble-Minded Institute, for which Legislature appropriated about \$82,000. (Previously noted.)

Tenn., Lebanon.—Postoffice.—Treasury Department, office of Oscar Wenderoth, supervising architect, Washington, D. C. Proposals received until August 25 for construction (including mechanical equipment, interior lighting fixtures and approaches) of United States postoffice; one story, basement and mezzanine; ground area about 3750 square feet; fireproof except ceiling and roof; stone and brick facing; composition roof; drawings and specifications obtainable from custodian at site, or at this office at discretion of supervising architect.

Tenn., Springfield.—Postoffice.—Treasury Department, Oscar Wenderoth, supervising architect, Washington, D. C., opened bids to erect postoffice building; James Corse, Racine, Wis., is lowest bidder at \$42,200 for limestone and \$43,000 for sandstone construction. (Recently noted.)

Tex., Clarksville.—Postoffice.—Treasury Department, office of Oscar Wenderoth, supervising architect, Washington, D. C.—Proposals received until August 19 for construction (including plumbing, gaspiping, heating apparatus, electric conduits and wiring, interior lighting fixtures and approaches) of United States postoffice; one story and basement; brick facing; composition roof; first floor only fireproof; drawings and specifications obtainable from custodian of site or at this office, at discretion of supervising architect.

Va., Petersburg.—Hospital.—Central State Hospital, Wm. F. Drewry, superintendent, will receive bids until July 22 to erect two-story brick building 197 feet long, with two wings each 30 feet long; reinforced concrete floor in main kitchen; plans and specifications on application.

Va., National Soldiers' Home.—Home.—Everett B. White, superintendent of Post Fund, Southern Branch, N. H. D. V. S., will receive bids until August 12 for material and labor to remodel power-house, building No. 17; plans, specifications and blank proposals obtainable at office of superintendent as above.

W. Va., Wheeling.—Lockkeepers' Houses.—Maj. F. W. Altstaetter, Corps Engineers, United States Army, Wheeling, will receive bids until August 1 to erect two two-story seven-room brick lockkeepers' houses at each of dams Nos. 16 and 17, Ohio River.

HOTELS

Md., Cumberland.—Western Maryland Hotel Co. will expend \$300,000 to erect fireproof hotel; tentative plans by A. Bernard Thumel, 4 Water St., Cumberland; working drawings not authorized. (Joseph H. Reinhardt recently noted interested in organization of company to erect hotel.)

N. C., Wilmington.—Wilmington Beach Corporation, Chas. C. Chadbourn, president, will erect hotels, bathhouses, dancing pavilion, etc. (See "Land Development.")

Tex., Beeville.—W. R. Lucas, Fredericksburg, Va., contemplates erection of hotel to cost \$50,000.

Tex., Mineral Wells.—Lamar Wells Co. is reported as to erect hotel.

Va., Petersburg.—Joseph L. Rosenberg has plans by R. A. Munden, Petersburg, for hotel on Sycamore St.; three stories and mezzanine; 50x120 feet; brick; steam heat; electric lighting; electric passenger and freight elevators and sidewalk lifts; Barrett roofing; bids opened August 1. (See "Machinery Wanted.")

Va., Fredericksburg.—Fredericksburg Hotel Co. opens bids August 7 to erect hotel; 80x30 feet; four stories and basement; reinforced concrete construction; plans by Philip N. Stern, Fredericksburg; plans ready July 16. (Recently noted.)

MISCELLANEOUS

Ala., Bay Minette.—Stable.—A. M. Thompson will erect livery stable at Hoyle Ave. and 1st St.; brick.

Ala., Birmingham.—Auditorium.—Gypsy Smith Auditorium Co. will be organized with \$10,000 capital stock by F. M. Jackson, E. H. Cabaniss and others to erect auditorium for Gypsy Smith revival.

Ark., Little Rock.—Clubhouse.—Bearskin Lake Club will erect frame clubhouse; cost \$7500.

D. C., Washington.—Clubhouse.—Commercial Club, Milton E. Ailes, president, 21 Madison Pl. N. W., has plans by Milburn, Holster & Co., Union National Bank Bldg., Washington, to remodel building on Farrar

gut Sq. for clubhouse at cost of \$30,000. (Previously noted.)

Ga., Columbus—Sanatorium.—Rose Hill Sanatorium incorporated with \$10,000 capital stock by Drs. J. H. McDuffie, H. S. Munroe, J. H. McDuffie, Jr., and M. E. Mann.

N. C., Newbern—Hosp'tal.—Drs. Richard N. Duffy, N. M. Gibbs, Raymond Pollock and others are promoting organization of company to erect hospital; two stories; capacity for 20 beds; cost \$35,000.

S. C., White Rock—Home.—Lowman Home, Rev. Edward Fulewelder, president, Dr. W. P. Cline, superintendent, will have plans prepared by J. B. Urquhart, Columbia, S. C., for home for aged, helpless orphans, etc., and training school for deaconesses.

N. C., Wilmington—Pavilions, etc.—Wilmington Beach Corporation, Chas. C. Chadbourn, president, will erect bathhouses, dancing pavilion, etc. (See "Land Development.")

Tenn., Knoxville—Stable.—Pryor, Brown & Son will erect stable at Church Ave. and Prince St. to replace structure reported burned at loss of \$10,000.

Tex., Georgetown—Grandstand, etc.—W. W. Edwards and associates will erect grandstand to seat 2500, one and one-half mile automobile racetrack and half-mile horse racetrack; cost about \$15,000.

Tex., Houston—Cafe.—Sauter Cafe, Travis St. and Preston Ave., is having plans prepared by Barnes & Finn, Houston, to remodel building; cost, including fixtures, \$6500.

Tex., Sherman—Hospital.—John Tulloch will receive bids until July 19 to erect four-story reinforced concrete, hollow-tile and brick hospital and power-house; separate bids for hot-water heat, plumbing, vacuum cleaning and electrical work.

Va., Newport News—Parish-house.—St. Paul's Episcopal Church will erect parish-house; two stories; R. T. Pierce, chairman of building committee.

Va., Staunton—Sanatorium.—Augusta Sanatorium incorporated with \$5000 capital stock; J. B. Catlett, president; I. H. Trimble, vice-president; W. S. Whitmore, secretary-treasurer.

RAILWAY STATIONS, SHEDS, ETC.

Ga., Atlanta—Georgia Railway & Power Co. will erect one-story brick and wood building at Glimmer and Phoenix Sts.; cost \$4500; day labor.

La., Independence.—Illinois Central Railroad, A. S. Baldwin, chief engineer, Chicago, Ill., will rebuild depot reported burned.

Okla., Spiro.—Kansas City Southern Railway, C. E. Johnston, chief engineer, Kansas City, Mo., will erect passenger station and move freight station to site opposite present location.

SCHOOLS

Ala., Mobile.—City voted \$150,000 bond issue for school improvements; to include purchase of site at Broad and Augusta Sts. and erection of \$34,000 school; purchase of site on Old Shell Rd. and erection of \$15,320 school, erection of \$25,000 building to replace Raphael Semmes school, rebuilding of Barton Academy, etc.; Board of Education, Harry T. Hartwell, president, will have plans prepared by L. H. McNeill, board's supervising architect, for structures to contain 14, 12 and 8 rooms. (Recently noted.)

Ala., Tuscaloosa.—City Commission will erect school near Kauldon.

Ark., Benton.—School Board will let contract July 23 to erect school; 65x75 feet; ordinary construction; electric lighting; composition roof; cost \$15,000; plans by Clyde A. Ferrell, 210½ Louisiana St., Little Rock, Ark., to whom proposals may be addressed. (Recently noted.)

Ark., Jonesboro.—State Agricultural School is having plans prepared by Frank M. Blaisdell, Little Rock, Ark., for horse and cow barn and show ring; brick, concrete and joist construction; cost \$10,000; proposals may be addressed to V. C. Kays of Jonesboro. (Recently noted.)

Ark., Winchester.—Winchester School Board, W. J. Hopkins, president, and Hardy Peacock, secretary, will erect school; two stories; brick; plans by Charles L. Thompson, Little Rock; bids received until July 15.

Fla., Largo.—School District No. 8 voted \$16,000 bond issue to purchase site and erect school. Address District School Trustees.

Fla., Starke.—City voted \$30,000 bond issue to erect school; Dr. T. D. Gunter, chairman Board of School Trustees. (Recently noted.)

Fla., Tallahassee.—Board of Control, P. K. Yonge, chairman, Windsor Hotel, Jackson-

ville, Fla., will receive bids until August 2 to erect dining hall at Florida State College for Women; drawings and specifications obtainable from W. A. Edwards, architect, 632 Candler Bldg., Atlanta, Ga., accompanied by certified check for \$25; subcontractors can procure drawings and specifications for \$10. (Recently described.)

Ga., Atlanta.—Fulton County Board of Education, E. C. Merry, superintendent, fifth floor Thrower Bldg., will receive bids until July 21 to erect four-room frame addition to Center Hill school; plans and specifications at office of superintendent.

Ga., Macon.—Representative Wallace Miller introduced bill in State Legislature authorizing vote on bond issues for schools and courthouses. (See "Courthouses.")

Ky., Lexington.—Transylvania University, R. H. Crossfield, president, will erect dormitory; cost \$50,000.

La., Hammond.—City will probably issue bonds to erect school at cost \$40,000 to \$45,000; is considering plans by W. T. Nolan of Nolan & Torre, New Orleans, La.

La., Westlake.—School Board of Calcasieu parish, F. R. Hamilton, superintendent, Lake Charles, La., opens bids August 7 to erect school; 60x127 feet; mill construction; hot-water heat; electric lighting; composition roof; cost \$19,000; plans by E. W. Phillips, Lake Charles, La.

Md., College Park.—Maryland Agricultural College will accept competitive plans for dormitory; Frank Baldwin, of Baldwin & Pennington, consulting architect, Professional Bldg., Baltimore, Md. (Previously noted.)

Miss., Monticello.—Lawrence County School Board will establish agricultural high school; is considering Monticello and Silver Creek as locations.

Mo., Columbia.—Curators of University of Missouri will open bids July 31 to erect biology building; slate roof; cost \$100,000; cost of equipment, \$25,000; also for live stock judging pavilion; plans by James P. Jamieson, 800 Security Bldg., St. Louis, Mo.; proposals to be addressed to J. G. Babb, secretary, Columbia; plans and specifications at office of architect, or may be had on deposit of \$25 for former and \$10 for latter; also reported to have purchased site for library, to be of Boone county limestone; Collegio-Gothic style; to resemble letter "W"; cross-bar to be constructed first and wings later; main reading-room 150 feet long; cost \$250,000; power-house, light and heat stations. (Previously reported as to erect \$100,000 biology building.)

Mo., Pittsburg.—Board of Education will call election to vote on bond issue to erect four-room addition to Forest Park School; will install heating, ventilating and plumbing equipment in Lakeside and Eugene Field schools.

Mo., St. Louis.—Board of Education will repair school building at 1111 Grattan St.; cost \$3900.

N. C., East Spencer.—School Board will receive bids to erect addition to graded school; also plans to issue \$10,000 of bonds for schools.

N. C., Greensboro.—Morehead township will vote August 12 on \$10,000 bond issue for schools. Address Guilford County Commissioners.

N. C., Raleigh.—Trustees of Meredith College purchased site and will erect building for conservatory of music, concert hall to seat 1500 and dormitories.

Okla., Tulsa.—City contemplates issuance of bonds for expenses and additions to schools. Address Board of Education.

Tenn., Alamo.—Crockett county will vote on \$12,000 bond issue to erect high school. Address County Commissioners. (Previously noted to have voted \$12,000 bond issue, but election declared invalid.)

Tenn., Dyersburg.—Dyer County Commissioners plan to erect high schools at Dyersburg, Trimble, Newbern and Finley; County Court authorized special tax for establishment of high schools.

Tenn., Finley.—Dyer County Commissioners, Dyersburg, Tenn., will erect county high school. (See Tenn., Dyersburg.)

Tenn., Lawrenceburg.—Lawrence County Commissioners will issue \$15,000 of bonds to erect brick school.

Tenn., Newbern.—Dyer County Commissioners, Dyersburg, Tenn., will erect county high school. (See Tenn., Dyersburg.)

Tenn., Trimble.—Dyer County Commissioners, Dyersburg, Tenn., will erect county high school. (See Tenn., Dyersburg.)

Tenn., Warrensburg, R. F. D. from Midway.—City will erect high school to cost about \$4000. Address The Mayor.

Tex., Fort Worth.—Texas Christian University, Medical Department, Dr. Bacon Saunders, president, will expend \$10,000 to enlarge and equip laboratories, and \$10,000 to erect amphitheater to accommodate 200 students.

Tex., Jayton.—City has plans by Elmer G. Withers, Stamford, Tex., for school; ordinary construction; cost \$12,000; proposals may be addressed to J. E. Robinson of Jayton. (Bond issue of \$12,000 recently noted voted.)

Tex., Richardson.—Richardson School District opens bids August 1 to erect school; 60x64 feet; semi-fireproof construction; electric lighting; metal and gravel roof; cost \$15,000; proposals may be addressed to S. P. Harben, Richardson. (Bond issue of \$16,000 recently noted voted.)

Tex., San Antonio.—School Board will expend \$20,000 to erect addition to high school building; four rooms and basement; brick; heating and lighting not determined; probably metal shingle roof; architect not selected; tentative plans pending bond issue to be voted on July 18. (Recently noted.)

Tex., Sweeny.—E. R. Clark, secretary of school trustees, will receive bids until July 19 to erect brick school building; plans and specifications at office of Mr. Clark at Sweeny, and Layton & Smith, architects, 526 Beatty Bldg., Houston, Tex.

Tex., Waxahachie.—City voted \$35,000 bond issue to erect school, etc. Address The Mayor.

Va., Emory.—Emory and Henry College has plans by C. B. Kearfoot, Bristol, Tenn., for proposed administration building; 108x177 feet; steam heat; electric lighting; cost \$75,000; proposals may be addressed to R. K. Sutherland of Emory.

Va., Newport News.—Board of School Trustees is having plans prepared by Chas. M. Robinson, Richmond, Va., for rebuilding John W. Daniel School recently reported burned at loss of \$50,000.

Va., Hollins.—Hollins College is having plans prepared by Frye & Chesterman, Roanoke, Va., for science building; cost \$25,000.

W. Va., Tunnelton.—Tunnelton School District voted \$35,000 bond issue to erect schools at Tunnelton and Manown and for heating plant for Kingwood School. Address District School Trustees.

W. Va., Warwood.—Richland Board of Education, H. F. Robinson, secretary, has plans for school building on Main St. (Previously noted.)

STORES

Ala., Birmingham.—Mrs. R. L. Marks opens bids about July 23 to erect store; 70x90 feet; two stories; brick; fireproof reinforced concrete construction; two hand-power elevators; plans by W. T. Warren, Empire Bldg., Birmingham. (Recently noted.)

D. C., Anacostia.—James F. Feddon will erect store building.

D. C., Anacostia.—Max Siman, 1909 Nichols Ave. S. E., Washington, D. C., will erect store building; 65x18 feet; mill construction; hot-water heat; gas and electric lighting; tin roof; cost \$4000.

D. C., Washington.—M. O. Bull, Woodridge, D. C., will probably award contract to W. A. Kninnell, Evans Bldg., Washington, to erect store and apartment building; 28x100 feet; brick; steam heat; electric lighting; slag roof; cost \$13,900; plans by Merrill T. Vaughn, Woodridge, Washington.

Fla., Tampa.—L. J. Jones rejected all bids to erect building at Lafayette and Ashley Sts. and will receive new bids; three stories; cost about \$60,000.

Fla., Orlando.—James L. Giles and C. A. Hovey have plans by Murry King, Orlando, for store and office building; 75x76 feet; brick; tin roof; cost \$20,000; date of opening bids not set. (Recently noted.)

Fla., Tampa.—Mrs. A. H. Parslow and Mrs. F. G. Mahoney (Fred Parslow, representative) will erect business building on Franklin St.; at least five stories.

Ga., Augusta.—W. W. Bussey will rebuild Silver Five and Ten Cent Store reported burned.

La., Lake Charles.—Murray-Brooks Hardware Co. postponed date of opening bids for improvements to store, including addition in rear to be used as warehouse; store improvements include pressed brick and glass front and plate-glass show windows. (Recently noted.)

La., New Orleans.—Colgate & Co., New York, are having plans prepared by Nolan & Torre, New Orleans, for building on Iberville St.; pressed brick; three stories.

La., New Orleans.—B. Cohn Company will

repair third, fourth and fifth stories of structure on Canal St.

Miss., Biloxi.—D. J. Gay will erect store and office building; two stories; brick; cost \$20,000.

Mo., St. Louis.—Joseph M. Michaels leased building at 710 Washington Ave., and will expend \$7500 for improvements.

Mo., St. Louis.—A. Oldain will erect two-story store building at 5224 Columbia St.; cost \$5200.

Mo., St. Louis.—Julius Bernacchi will erect store and apartment building to cost \$7500.

Mo., St. Louis.—George Koos will erect store and dwelling at 2400 Emerson St.; cost \$4000.

Mo., St. Louis.—Robert W. Inmann will erect building in University City.

N. C., Lenoir.—E. L. Steele and J. L. Cottrell will erect building; two stories; brick; lower floor for two stores; upper floor for offices.

S. C., Columbia.—Consolidated Holding Co. will erect six stores at 1116-18-20-22-24-26 Lady St.; cost \$24,000.

S. C., Columbia.—Lorick & Lowrance will erect store building to replace burned structure; 50x80 feet; three stories and basement; slow-burning or mill construction; sprinkler system; metal window openings with wired glass; electric passenger elevator; front of pressed brick and terra-cotta; will remodel old building at completion of new structure; cost \$40,000 to \$50,000; plans by George E. Lafaye, Columbia.

Tenn., Chattanooga.—Century Company organized with \$250,000 capital stock by John A. Patten, W. A. Sadd, W. E. Brock and others to erect Century Bldg. at 8th and Market Sts.; about 12 stories. (Previously noted.)

Tenn., Chattanooga.—Steinhaus Bros. will erect two-story brick building on Fort St.; cost \$4000.

Tex., Beaumont.—H. A. Perlstein will erect brick business building at Orleans and Forsythe Sts.

Tex., Cuero.—W. H. Shannon has plans by Klausner & Whipkey for store building; 26x80 feet; one story; cost \$3000; no contract. (Recently noted.)

Tex., Dallas.—W. M. Alexander will erect one-story brick building at 615 E. Jefferson St.; cost \$9000.

Tex., Dallas.—P. G. Gorman will erect two-story brick building at 2516 Main St.; cost \$4000.

Tex., Dallas.—Goldsmith Dry Goods Co., I. Goldsmith, president, is having plans prepared by Lang & Wittichell, Dallas, for store building at Murphy and Elm Sts.; three stories and basement; reinforced concrete; brick facing; fireproof.

Tex., Galveston.—Walker-Smith Company, Brownwood, Tex., will erect building at 20th St. and Avenue A; temporary quarters at 24th St. and Avenue A.

Tex., Port Arthur.—C. E. Smith will erect business building on Houston Ave.; one story; concrete brick; 50x60 feet; foundation to support additional story; cost \$8000.

Tex., San Antonio.—Mrs. M. Riebe will expend \$4800 for alterations and addition to building on North St.

Va., Phoebus.—Dr. George K. Vanderslice will erect two-story frame building at County St. and Willard Ave.; cost \$5700.

THEATERS

Ark., Pine Bluff.—Best Theater Co. is having plans prepared by Theo. M. Sanders, Little Rock, Ark., for moving-picture theater; cost \$10,000.

Ky., Lexington.—Lexington Theaters Co. incorporated with \$20,000 capital stock by W. S. Herndon, Frank Christian and L. A. Ramsey.

La., Franklin.—Lauve-Bodin Amusement Co. incorporated with \$50,000 capital stock; James A. Peterman, president; William T. Peterman, vice-president; Thomas Bodin, secretary; Charles Lauve, treasurer; will erect opera-house at Commerce and Main Sts.

La., New Orleans.—E. A. Billet will erect moving-picture theater on Dryades St.

Md., Baltimore.—William Fait, 312 W. Baltimore St., acquired Lexington Moving-picture Theater, adjoining Little Pickwick Theater, on Lexington St. near Eutaw St., and is having plans prepared by John Freund, Jr., Hoffman Bldg., Baltimore, to combine two structures, remodel, install new front, provide seating capacity of 450, etc.

Tex., Aransas Pass.—Albert Warren will erect opera-house on Commercial-St.

Tex., Houston.—Josiah Pearce & Sons, New Orleans, La., will erect theater on Main St. between Capitol and Rusk Aves.; approximate seating capacity, 1000.

WAREHOUSES

Fla., Tarpon Springs.—E. R. Meres, L. S. Fernald and Arthur Pinder are committee to promote erection of sponge exchange; brick; fireproof; cost \$6000.

Ga., Rome.—Rome Oil & Fertilizer Co. will erect storage building.

La., Lake Charles.—Murray-Brooks Hardware Co. has plans by I. C. Carter, Lake Charles, for warehouse; 50x32 feet; two stories; ordinary construction; fireproof openings; built-up gravel roofing; cost \$12,000; date of opening bids not set. (See "Stores.")

La., Lake Charles.—Standard Oil Co., New Orleans, La., will erect brick warehouse, several steel tanks for petroleum and gasoline and construct wharf; cost of improvements about \$10,000.

N. C., Newton.—Catawba County Farmers' Union Warehouse Co. incorporated with authorized capital stock of \$25,000; will erect warehouse.

S. C., Columbia.—Southern States Ware-

house Co. increased capital stock from \$25,000 to \$250,000.

S. C., Columbia.—Merchants' Warehouse & Distributing Co., Inc., is erecting warehouse and distributing-house; 40x150 feet; ordinary construction; brick; composition roof; cost \$4000; day labor.

Tex., Coleman.—Coleman Grain & Mercantile Co. will erect warehouse; one story; 50x100 feet.

Tex., Houston.—Continental Supply Co. will erect warehouse on Buffalo Bayou; cost \$4000.

Tex., Waco.—Texas Coffin Co. will erect 60x90-foot addition to warehouse. (Recently noted under "Woodworking Plants.")

Va., Phenix.—Phenix Warehouse Co. incorporated with \$5000 capital stock; A. F. Fears, president, Charlotte Courthouse, Va.; C. A. Berkley, vice-president; C. R. Morton, secretary-treasurer, both of Phenix.

Va., Portsmouth.—Norfolk & Western Railway, C. S. Churchill, chief engineer, Roanoke, Va., will erect storage icehouse; cost about \$6000.

Va., Richmond.—A. W. Walkup will erect detached brick warehouse on 17th St. between Brown and Washington Sts.; cost \$4000.

ger-Pentz Company, 600 Equitable Bldg., Baltimore, to install sprinkler system and standpipe in building at Bayview, and at \$3882 to Fred. Decker & Son, 1200 E. Biddle St., Baltimore, for firedoors; subcontract awarded to General Fire Extinguisher Co., Providence, R. I., for independent fire line, etc. (Previously noted.)

Miss., Charleston.—Jail.—Tallahatchie county awarded contract to F. B. Hull Construction Co., Jackson, Miss., to erect jail and jailer's residence; 35x42 feet; fireproof; hot-air heat; composition roof; cost \$11,500; plans by Overstreet & Spencer, Scutter Bldg., Jackson, Miss. (Recently noted.)

COURTHOUSES

Miss., Meadville.—Franklin county awarded contract to William Steltenroth, Natchez, Miss., to erect courthouse; 53x112 feet; fireproof; composition tile roof; cost \$35,000; plans by Overstreet & Spencer, Scutter Bldg., Jackson, Miss.; contract for heating, plumbing and electrical work awarded to R. M. Nalty of Brookhaven, Miss. (Recently noted.)

Tenn., Henderson.—Chester County Commissioners awarded contract to O'Dair, Roberts & McGee, Henderson, to erect courthouse; 50x76 feet; ordinary construction; tile or galvanized roof; plans by H. T. McGee, Memphis, Tenn. (Recently noted.)

Tex., Crosbyton.—Crosby county will expend \$50,000 to erect courthouse; two stories; fireproof; pitch-gravel roof; cost of heating plant \$4000; plans by M. L. Waller, Fort Worth, Tex.; contract recently noted awarded to S. Goodrum, Sweetwater, Tex. (See "Machinery Wanted.")

DWELLINGS

Ala., Gadsden.—Abe Saks awarded contract to erect bungalow on Lookout Mountain.

Ala., Huntsville.—Central Presbyterian Church awarded contract to erect \$7000 manse. Address The Pastor, Central Presbyterian Church.

Ark., Batesville.—G. E. Yeatman awarded contract to Fugett & Russ, Batesville, to erect dwelling; 35x31 feet; cost \$4800; plans by Theodore Saunders, Little Rock, Ark. (Recently noted.)

D. C., Washington.—Louis Bradley, 15th St. and Pennsylvania Ave. S. E., awarded contract to George W. Barkman, 900 Massachusetts Ave. N. E., Washington, to erect two-story dwelling at 1409 Pennsylvania Ave. S. E.; cost \$9000; plans by L. T. Williams.

D. C., Washington.—Edith B. Seek awarded contract to G. S. Seek, 6921 Georgia Ave. N. W., Washington, to erect two-story frame dwelling at 7419 Blair Rd. N. W.; cost \$3000.

D. C., Washington.—J. S. Gruver, Union Trust Bldg., awarded contract to Thrift Building Co., Union Trust Bldg., Washington, to erect 15 two-story dwellings at 220-236 Randolph Pl. N. E., 314-16-18 Seaton Pl. N. E. and 3613-15-17 10th St. N. W.; cost \$45,000; plans by L. T. Williams.

Fla., Tampa.—D. C. Gillett awarded contract to Logan Bros., Tampa, to erect dwelling on Bay Shore Blvd.; 51x60 feet; two stories; cost about \$8500; plans by F. Curtis, Tampa. (Previously noted.)

Fla., Tampa.—Lee MacDonald awarded contract to Logan Bros., Tampa, to erect dwelling; two stories; ten rooms; cost about \$8000; plans by F. J. Kennard, Tampa. (Previously noted.)

Ga., Atlanta.—D. G. Euloe awarded contract to Cowan & Dunn to erect residence at 338 St. Charles Ave.; 31x31 feet; brick veneer; hot-air furnace; gas and electric lighting; composition roof; cost \$4500.

Ga., Atlanta.—J. J. Haverly awarded contract to Pittman Construction Co., 1121 candler Bldg., Atlanta, to erect proposed residence on Peachtree Rd.; 10x35 feet; brick-veneer; vapor heat; tile roof; cost \$40,000; plans by E. E. Dougherty, Atlanta.

Ga., Jackson.—W. M. Andrews awarded contract to E. I. Rooks to erect nine-room residence on Indian Spring St.

Ga., Savannah.—L. C. Gerken will erect five one-story frame dwellings on Ott St.; one story; cost \$3000; plans and construction by W. L. Hussey.

La., Algiers, Station A, New Orleans.—Mrs. S. Holland awarded contract to Joseph Llanox to erect residence on Diana St.

Md., Baltimore.—George N. Rogers, 606 American Bldg., awarded contract to Webb & White, Title Bldg., Baltimore, to erect residence on Ridge Rd., near North Ave., Hill Top Park; stucco; two and a half stories; 10 rooms and 2 baths; green slate roof; cost \$4500; plans by Clinton P. Greer, 1011 Keyser Bldg., Baltimore.

Md., Baltimore.—R. Moran awarded contract to Webb & White, Title Bldg., Baltimore, to erect residence on Ridge Rd., Hill Top Park; three stories; stucco; 12 rooms; two baths; slate roof; hot-water heat.

Md., Baltimore.—Albert D. Bernard, Central Savings Bank Bldg., awarded contract to Edward Watters & Co., 509 N. Charles St., Baltimore, to erect residence at Guilford; two and a half stories; brick and tile; 40x34 feet; cost \$13,000; plans by Edward L. Palmer, 408 Roland Ave., Roland Park, Md. (Recently noted.)

Md., Catonsville.—Herman Kruse, 2735 W. North Ave., Baltimore, Md., awarded contract to Frederick Maisel, Jr., 517 Ingleside Ave., Catonsville, to erect cottage.

Md., Catonsville.—William O. Pierson awarded contract to John H. Gerwig, Catonsville, to erect two stucco and frame cottages; cost \$7000 each.

Mo., St. Louis.—Holy Name Catholic Church, Rev. C. E. Byrne, pastor, awarded contract to erect church building and priest's house. (See "Churches.")

Mo., St. Louis.—Charles G. Haselhorst, 235A Allin Ave., awarded contract to H. Kissel & Sons to erect dwelling; 26x34 feet; hot-air heat; gas and electric lighting; slate roof; cost \$4000; plans by J. Boehmer, 3509 Palm St., St. Louis. (Recently noted.)

Mo., St. Louis.—N. G. Williams has plans by and awarded contract to W. P. Miles, 4017 Juniata St., St. Louis, to erect dwelling; 26x31 feet; two stories; brick; hot-air heat; electric lighting; slate roof; cost \$4000. (C. G. Williams recently noted to erect dwelling.)

N. C., Asheville.—E. B. Campbell awarded contract to Wrenn & Garland to erect residence; 41x56 feet; veneer brick; tile roof; hot-water heat; cost \$10,000; plans by Chas. N. Parker, Asheville. (Recently noted.)

S. C., Gaffney.—J. A. Carroll awarded contract to W. J. Hyndman, Charlotte, N. C., to erect dwelling; plans by Louis H. Asbury, Charlotte, N. C., from whom information is available. (Recently noted to cost \$20,000.)

Tenn., Chattanooga.—L. V. Duncan, 501 Bailey Ave., has plans by and awarded contract to A. W. Duncan, 501 Duncan Ave., Chattanooga, to erect dwelling; 30x34 feet; eight rooms; brick; slate roof; cost \$3000. (Recently noted.)

Tenn., Chattanooga.—T. I. Walters has plans by and awarded contract to Stewart & Johnson, Chattanooga, to erect California type bungalow; brick and stucco; seven rooms; cost \$5000.

Tenn., Memphis.—J. H. Stutz awarded contract to F. E. Meacham to erect residence at 1656 Penbody Ave.; cost \$6000.

Tex., Bay City.—Misses Hawkins awarded contract to O. E. Hatchett, Bay City, to erect dwelling; 41x48 feet; porches; brick and brick veneer; fireplace, grates and stoves; electric lighting; tile roof; tile floors for porches; cost \$20,000; plans by Dennis R. Walsh, Austin, Tex. (Recently noted.)

Tex., Dallas.—J. B. Hereford awarded contract to W. O. James, Houston, to erect residence on Beverly Drive; Dutch colonial style; cost \$15,000; plans by Hubbard & Greene, Dallas.

Tex., Dallas.—Dr. Elbert G. Dunlap awarded contract to W. O. James, Dallas, to erect residence on Lemmon Ave.; colonial style; brick-veneer; cost \$14,000; plans by Hubbard & Greene, Dallas.

Tex., Dallas.—W. A. Dyckman awarded contract to Emil Kligus to erect residence on Gillon Ave.; English half-timbered style; cost \$15,000; plans by Hubbard & Greene, Dallas.

Tex., Hearne.—Morris Cohen awarded contract to erect two-story residence.

Tex., Hearne.—R. H. Moss awarded contract to W. A. Biggs to erect two-story residence.

Tex., Pecos.—W. J. Levin awarded contract to David Crockett, El Paso, Tex., to erect \$20,000 residence 25 miles from Pecos; also for construction of \$10,000 cement water tank.

Tex., Pecos.—C. E. B. Jones awarded contract to erect two rent houses and residence.

Tex., Victoria.—J. W. Henderson awarded contract to Fred Urban of Victoria to erect dwelling; 45x60 feet; two stories; frame; low-pressure steam heat; electric lighting; century asbestos roof; cost \$9000; plans by S. H. Dixon, Jr., Victoria. (Recently noted.)

Tex., Wharton.—W. B. Barbee awarded contract to erect \$5000 bungalow.

Va., Norfolk.—W. W. Gregory awarded

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

D. C., Washington.—John C. and George F. Trellis awarded contract to Andrew Murray, 729 12th St., Washington, for fireproof apartment-house; 42x56 feet; four stories; Warren Webster's vapor system of heating; electric lighting; slag roof; cost \$25,000; plans by A. B. Mullett, Union Trust Bldg., Washington.

Md., Baltimore.—Ashburton Apartment Co. has plans by and awarded contract to Geo. R. Morris, 45 Gunther Bldg., Baltimore, to erect two apartments at northeast and southwest corners of Fairview and Edgewood Aves.; 41x56 feet; cost \$20,000.

Mo., St. Louis.—B. Thieme has plans by and awarded contract to Leo K. Milberger, 3426 California Ave., St. Louis, to erect tenement-house; 25x56 feet; ordinary construction; gravel roof; cost \$5000; cost of heating plant \$650; cost of lighting plant \$100. (Recently noted.)

Mo., St. Louis.—Po Mo Realty & Investment Co. awarded contract to Fred Shmitt & Co., 5912 Van Versen St., St. Louis, to erect apartment-house; 28x61 feet; mill construction; cost \$10,000. (Recently noted.)

ASSOCIATION AND FRATERNAL

Ga., Atlanta.—District Grand Lodge No. 18, Grand United Order of Odd Fellows, awarded contract to R. E. Pharrow, Odd Fellows Bldg., Atlanta, to erect auditorium and office building; 135x100 feet; two stories; semi-fireproof; electric lighting; tar and gravel roof; cost \$75,000; plans by W. A. Edwards, 632 Candler Bldg., Atlanta, Ga. (Previously noted.)

Ky., Hickman.—St. Charles Lodge No. 91, United Brothers of Friendship, has plans by and awarded contract to B. Moore, Hickman, to erect lodge and store building; 40x60 feet; brick walls and concrete floor; metal roof; cost \$3000.

Ky., Shepherdsville.—Ancient Free and Accepted Masons awarded contract to Samuel A. Hornbeck to erect \$10,000 building according to plans by Rev. S. N. Williams, Louisville, Ky. (Previously noted.)

Md., Baltimore.—Baltimore Lodge No. 70, Loyal Order of Moose, will award contract to J. Henry Miller, Inc., 106 Dover St., Baltimore, to erect club building at 410 W. Fayette St.; 54x132 feet; three stories and basement; brick and stone; terra-cotta trimmings; auditorium to seat 1000; roof garden; bowling alleys, poolrooms, etc.; cost \$75,000; plans by J. E. Lafferty, 11 Pleasant St., Baltimore. (Recently noted.)

Okl., Maysville.—Independent Order of Odd Fellows, Ancient Free and Accepted Masons, and J. R. Ham awarded contract to A. H. Kinner, Cordele, Okla., to erect lodge and store building; 25x100 feet; two stories; ordinary construction; felt roof; cost \$4500; plans by J. R. Richardson, Sulphur, Okla. (Recently noted.)

Tex., Waco.—The Praetorians awarded contract to Hughes & O'Rourke Construction Co., Dallas, Tex., to erect lodge building; seven stories, basement and roof garden; 50x55 feet; cost \$120,000; C. B. Gardner, L. Blaylock and others, committee. (Previously noted.)

BANK AND OFFICE

Fla., Fellsmere.—State Bank of Fellsmere awarded contract to W. G. Hankins, Kissimmee, Fla., for furnishing 37-foot bank fixtures, with all desks, furniture, vault lining and door, burglar-proof safe, adding machine, typewriters, etc. (Contract for building previously noted awarded.)

Fla., Haines City.—State Bank of Haines City awarded contract to W. G. Hankins, Kissimmee, Fla., for entire equipment for store, including fixtures, furniture, vault, burglar-proof safe, adding machine, typewriters, etc.

S. C., Summerville.—Morris Mirmow, Orangeburg, S. C., awarded contract to erect office, store, arcade and theater building. (See "Stores" and "Machinery Wanted.")

Tex., Longview.—Moos & Rodgers, Marshall, Tex., have contract to erect office and store building. (See "Stores.")

Tex., Sealy.—Farmers' National Bank awarded contract to J. T. Colleton and Olof Johnson to erect bank building; 30x60 feet; fireproof; one story, with foundation for additional story; asphalt vulcanized roof; cost \$3000; plans by E. L. Gallia. (Recently noted.)

CHURCHES

Md., Baltimore.—Mt. Sinai Baptist Church awarded contract to William Flagg, 1715 W. North Ave., Baltimore, to erect building at 806-08 10 Ashland Ave.; one story; brick; 38x42 feet; cost \$4000.

Mo., St. Louis.—Holy Name Catholic Church, Rev. C. E. Byrne, pastor, 2037 E. Grand Ave., will expend \$65,000 to erect church building and priest's house; 64x130 feet and 34x46 feet; ordinary construction; hot-water heat for church building and steam heat for dwelling; electric lighting; slate roof; plans by J. H. and A. F. Stauder, Temple Bldg., St. Louis; contract recently noted awarded to John Costello & Son, 2519 St. Louis Ave., St. Louis.

Va., Portsmouth.—Calvary Baptist Church, Rev. W. R. Leckliter, 215 Glasgow St., pastor, awarded contract to C. M. Moody, Portsmouth, to erect building; 132x73 feet and 76x123 feet; brick and stone; slate roof; cost \$37,000; heating, lighting, furniture and glass contracts separate; plans by C. M. Major, Portsmouth. (Recently noted.)

Va., Port Norfolk, P. O. Portsmouth.—Port Norfolk Baptist Church has plans by and awarded contract to C. M. Major, Portsmouth, to erect Sunday-school building; two stories; frame; main Sunday-school room 65x73 feet; accordion doors; cost \$11,000. (Previously noted.)

Va., Scottsville.—Calvary Baptist Church awarded contract to C. N. Moody, Norfolk, Va., to erect building; cost \$22,000; plans by C. M. Major, Portsmouth, Va. (Previously noted.)

W. Va., Hollidays Cove.—J. W. Martin prepared plans and has contract to erect church building; 90x60 feet; steam heat; gas and electric lighting; cost \$10,000.

CITY AND COUNTY

Md., Baltimore.—Hospital.—Board of Awards awarded contract at \$22,000 to Sin-

contract to Sawyer Bros., Norfolk, to erect frame residence on 9th St.; frame; cost \$2800.

Va., Danville.—F. M. Meeks awarded contract to W. A. Gravelly, Danville, to erect dwelling; seven rooms; ordinary construction; grates; electric lighting; tin shingle roof; cost \$3000; plans by Charles G. Pettit, Danville. (Recently noted under "Stores.")

Va., Danville.—N. H. Hazlewood, Jr., has plans by and awarded contract to Longest & Tessier, Danville, to erect dwelling; two stories; nine rooms; fireproof construction; stucco walls inside and out; hot-air heat; electric lighting; metal tile roof; cost \$5000. (Recently noted.)

Va., Norfolk.—L. E. Wilson awarded contract to Mattox & Davis, Norfolk, to erect frame residence on 12th St.; cost \$3500.

Va., Norfolk.—George L. Bonney awarded contract to Sawyer Bros., Norfolk, to erect two residences on 20th St.; frame construction; cost \$5000.

Va., Suffolk.—J. M. Darden awarded contract to W. T. Gregory, Norfolk, to erect residence; cost \$40,000; plans by J. M. McMichael, Charlotte, N. C.

GOVERNMENT AND STATE

D. C., Tacoma.—Hospital.—Depot Quartermaster, U. S. Army, Washington, D. C., awarded contract at \$21,384 to erect additional ward at Walter Reed General Hospital to J. S. Reynolds, 1816 1st St. N. W., Washington, D. C.; 57 feet 10 inches by 93 feet 8 inches; corridors, 33 feet 2 inches by 17 feet; two stories; fireproof; hot-water heat; electric lighting; tin roof. (See "Machinery Wanted.")

Ga., Fort Oglethorpe.—Maj. T. B. Hacker, Quartermaster Corps, awarded contract to George Brecking to erect detention hospital; brick; slate roof; two stories; porches; cost \$22,000. (Recently noted.)

Ky., Cynthiana.—Postoffice.—Treasury Department, Oscar Wenderoth, supervising architect, Washington, D. C., awarded contract at \$58,678 to George W. Stiles Construction Co., Chicago, Ill., to erect postoffice; limestone construction. (Recently noted.)

Mo., Springfield.—Postoffice.—Treasury Department, Oscar Wenderoth, supervising architect, Washington, D. C., awarded contract at \$96,666 to General Construction Co., Milwaukee, Wis., for extension to postoffice building. (Previously noted.)

Va., Radford City.—Postoffice.—Treasury Department, Oscar Wenderoth, supervising architect, Washington, D. C., awarded contract to John D. Seay, Lynchburg, Va., to erect United States postoffice; two stories and basement; brick, with stone trimmings; steam heat; cost \$25,000. (Previously noted.)

HOTELS

Fla., Tarpon Springs.—Tarpon Springs Hotel Co., I. B. Read, vice-president, awarded contract at \$3900 to G. E. Nobilt Hardware Co., Tarpon Springs, for roofing and sheet-metal work, and at \$3068 to same firm for steam heating for Tarpon Inn. (Other contracts recently noted awarded.)

Ky., Louisville.—Seelbach Realty Co. awarded contract to erect hotel; 32x100 feet; 10 stories; fireproof steel construction; heating and lighting contracts also let; cost \$100,000; plans by H. E. Kennedy, Pittsburgh, Pa. (Previously noted.)

Md., Baltimore.—E. Quarles is reported to have awarded contract to Consolidated Engineering Co., 61 Gunther Bldg., Baltimore, to alter and extend Terminal Hotel at Park Ave. and Fayette St.; will provide frontage on Park Ave. of 92 feet, alter interior, etc.; cost about \$6000.

Tex., Smithville.—Yerger Hill awarded contract to erect three-story brick hotel at 2d and Olive Sts.

Va., Richmond.—Hotel Stumpf will erect addition to hotel; 35 rooms with private baths; fireproof; present structure and annex probably to have first story of granite; cost \$40,000; awarded contract to Gilsonite Construction Co., St. Louis, Mo.; plans by Widmann & Walsh, St. Louis, Mo.

MISCELLANEOUS

Md., Baltimore.—Hospital School.—Children's Hospital School, Green Spring Ave., awarded contract to Gladfelter & Chambers, 2074 Woodberry Ave., Baltimore, to erect addition; two stories; tile and brick; plans by Howard Hill, 11 E. Pleasant St., Baltimore. (Recently noted.)

RAILWAY STATIONS, SHEDS, ETC.

Fla., Fort Meade.—E. W. Parker, Tampa, Fla., has contract to erect railway station.

(Atlantic Coast Line Railway Co., E. B. Pleasants, chief engineer, Wilmington, N. C., recently noted to erect depot.)

Ga., Lagrange.—Atlanta, Birmingham & Atlantic Railroad Co., L. L. Beall, chief engineer, Austell Bldg., Atlanta, Ga., awarded contract to C. H. Austin, Ocilla, Ga., to erect passenger depot, and to Nichols Contracting Co., Atlanta, Ga., for excavating and concrete work; 30x116 feet; one story; brick veneer; stoves; electric lights. (Previously noted.)

Va., Manchester, Ind. Sta., Richmond.—Thomas L. Nichols, 1104 McDonough St., Richmond, Va., has contract for exterior iron work on Manchester Station.

SCHOOLS

Ark., Bentonville.—Vaughan School District Trustees awarded contract to erect \$3000 school building. (Previously noted.)

Ark., Magnolia.—Directors Third District Agricultural School awarded contract through Witt, Seibert & Co., architects, Texarkana, Ark., to Sodemann Heat & Power Co., St. Louis, Mo., for heating system for school to cost about \$20,000. (Recently noted to have awarded contract to C. A. Powell, Magnolia, to erect nine buildings.)

Fla., Tallahassee.—Directors of Normal and Industrial School for Negroes awarded contract to E. B. Dyer to erect mechanics art building to replace burned structure.

Ga., Macon.—Board of Education awarded contract at \$90,687 to W. J. Beeland, Macon, to erect high school at Orange and Forsyth Sts.; plans by Blair & Adams, 673 Cherry St., Macon. (Recently noted.)

La., Homer.—Claiborne Parish Board of School Directors awarded contract to Caldwell Bros., Abbeville, La., to erect school; ordinary construction; steam heat; electric lighting; composition roof; plans by Stevens & Nelson Company, New Orleans, La. (Previously noted.)

N. C., Lenoir.—Davenport College awarded contract to erect dormitory; 20 rooms and five classrooms; cost about \$20,000; plans by Louis H. Asbury, Charlotte, N. C. (Previously noted.)

Tenn., Memphis.—Phipps-Miller School awarded contract to R. F. Creson to erect school at 1880 Madison Ave.; cost \$15,000.

Tex., Belton.—Baylor Female College, J. C. Hardy, president, awarded contract to Fischer & Lambie, 108 W. 5th St., Austin, Tex., to erect dormitory; ordinary construction; cost \$25,000 to \$30,000; plans by Milton W. Scott & Co., Waco, Tex.; heating and plumbing contracts not let. (Recently noted.)

Tex., Giddings.—City awarded contract to H. H. Snowden, Cuero, Tex., to erect school building according to plans by Henry T. Phelps, San Antonio, Tex. (Recently noted.)

Tex., Gollad.—School Board awarded contract to J. T. Spidel, Gollad, to erect three schools; one-room, four-room and twelve-room buildings; mill construction; brick; heating and lighting not determined; metal roof; cost \$22,000; plans by Green & Finger, Galveston, Tex. (Contract recently noted awarded to J. W. Williams to erect Germania school.)

Tex., Houston.—William M. Rice Institute, Edgar Odell Lovitt, president, awarded contract at \$285,903 to James Stewart & Co., St. Louis, Mo., to erect physics laboratory; laboratory proper two stories, 275x56 feet, connected with amphitheater 120x52 feet; lecture and research rooms provided with individual service for students, with gas, water, steam, compressed air, vacuum and both direct and alternating currents of electricity; plans by Cram, Goodhue & Ferguson, Seanolin Bldg., Houston, New York and Boston, Mass.; William Ward Watkins, superintendent of construction; J. W. Northrop, Jr., clerk of works. (Previously noted.)

Tex., Kopperl.—City awarded contract to A. J. Olsen, Cisco, Tex., to erect school; metal shingle roof; cost \$7000; cost of heating plant, \$325.

Va., Alexandria.—St. Mary's Academy, conducted by Sisters of Holy Cross, awarded contract to Julian D. Knight to repair buildings.

Va., Richmond.—Richmond College Trustees awarded contract to Harwood & Moss, Newport News, Va., to erect refectory; reported cost \$50,000; W. L. Carneal, Jr., supervising architect, Richmond. (Previously noted.)

STORES

Fla., Fellsmeere.—Dunnam & Chambers awarded contract to W. G. Hankins, Kissimmee, Fla., for remodeling store with complete fixtures, showcases, etc.

Fla., Kissimmee.—M. Katz awarded contract to W. G. Hankins, Kissimmee, for complete equipment for dry goods store, including fixtures, showcases, etc.

Ga., Atlanta.—D. Greenfield estate awarded contract to Molise de Leon, Atlanta, to erect building on South Forsyth St. near Mitchell St.; one story and basement; 113x85 feet; cost \$25,000; construction to permit erection of nine additional stories.

Ga., Atlanta.—J. M. Stephens awarded contract to Jim Walker to repair building at 56 Park St.; cost \$4500.

Ga., Columbus.—J. Weiner awarded contract to Cooper Lumber Co., Columbus, to erect business building; three stories on first floor.

Ky., Hickman.—St. Charles Lodge No. 91, United Brothers of Friendship, awarded contract to erect store and lodge building; Hickman Joint Stock Co. recently noted to erect building. (See "Association and Fraternal.")

La., Pineville.—Trustees of Louisiana Baptist College awarded contract to E. T. Elam to erect dormitory; two stories; brick; will use foundation of burned structure; cost about \$25,000. (Recently noted.)

Mo., St. Louis.—Dominion Investment Co. awarded contract to John Hill Construction Co., 915 Olive St., St. Louis, to erect store and warehouse for Scruggs-Vandervoort-Barney Dry Goods Co.; 12 stories; plans by H. F. Roach, 1430 Syndicate Trust Bldg., St. Louis. (Holbrook-Blackwelder Real Estate Trust Co. previously noted to erect building.)

N. C., Sanford.—Mrs. Flora Jones will expend \$7000 to erect store building; 48x90 feet; ordinary construction; tin roof; contract recently noted awarded to J. W. Stout & Co., Sanford.

N. C., Winston-Salem.—H. R. Starbuck awarded contract to J. L. Crouse to erect store building; two stories; two rooms; brick; tin roof; gas and electric lights; cost \$15,000.

S. C., Summerville.—Morris Mirmow, Orangeburg, S. C., awarded contract to J. A. Cooper, Summerville, to erect arcade, store, office and theater building recently noted; 63x61 feet 6 inches and 45x75 feet; two stories; brick; electric lighting; tin roof; cost \$10,000; plans by Henry Ayers, Orangeburg, S. C. (See "Machinery Wanted.")

Tex., Floydada.—Sandhill School District awarded contract to W. R. Simmons, Plainview, Tex., to erect school; brick construction; cost \$5000. (Previously noted.)

Tex., Longview.—Moos & Rodgers, Marshall, Tex., have contract to erect store and

office building; 57x150 feet; two stories; mill construction; cost \$24,000.

Tex., Placedo Junction.—F. W. Wick awarded contract to A. T. Clark, Teague, Tex., to erect business building; 30x90 feet; two stories; brick; ordinary construction; cost \$3500; plans by S. H. Dixon, Jr., Victoria, Tex. (Recently noted.)

Tex., Yoakum.—W. L. Burton awarded contract to erect brick business building at Grand Ave. and Front St.

Va., Norfolk.—S. W. Steele awarded contract at \$34,990 to Baker & Brinkley, Norfolk, to erect building; 55x150 feet; four stories; reinforced concrete; porcelain, brick and tile roof; two stores on ground floor; plans by Neff & Thompson, Norfolk. (Previously noted.)

Va., Roanoke.—Century Investment Co., it is reported, awarded contract to erect two two-story store buildings.

Va., Roanoke.—Commercial Development Co. awarded contract to Wade & Graham, Roanoke, to erect two-story building; fireproof; plans by Frye & Chesterman, Lynchburg, Va. (Recently noted.)

Va., Roanoke.—H. C. Elliott acquired Frank E. Brown property on Campbell Ave. and will remodel and enlarge; install new front, erect two-story extension; cost \$10,000; awarded contract to Wade & Graham, Roanoke.

THEATERS

S. C., Summerville.—Morris Mirmow, Orangeburg, S. C., awarded contract to J. A. Cooper to erect theater, arcade, store and office building recently noted. (See "Stores" and "Machinery Wanted.")

WAREHOUSES

Ala., Huntsville.—W. L. Lyle Commission Co. awarded contract to erect warehouse on Washington St.; cost \$15,000.

Mo., St. Louis.—Dominion Investment Co. awarded contract to erect warehouse and store for Scruggs-Vandervoort-Barney Dry Goods Co. (See "Stores.")

N. C., Wilmington.—W. B. Cooper awarded contract to Thomas De Vane of Wilmington to erect warehouse; 130x220 feet; tin roof; cost \$25,000; plans by W. H. Banck, Garrett Bldg., Wilmington; contract for driving piles recently noted awarded to J. S. Williams.

W. Va., Charleston.—Hubbard Grocery Co. awarded contract to J. C. and J. L. Jones to erect warehouse; plans by H. Rus Warne, Charleston.

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Birmingham.—The Birmingham-Tuscaloosa Railway & Utilities Co. is reported to have filed the \$5,000,000 mortgage for its bonds, and thus insures the beginning of construction of its line from Birmingham to Tuscaloosa and the completion of 10 miles of street railway at Tuscaloosa by December 31. G. I. Brown of Birmingham is general manager. Grading has been resumed at Riverview, near Tuscaloosa. (See Manufacturers Record, July 10)

Ala., Birmingham.—The St. Louis & San Francisco Railroad, according to a report quoting an officer, proposes to build an extension of its Empire branch to Panama, Ala. An extension of five miles to Sipsey was recently finished. F. G. Jonah is chief engineer at St. Louis, Mo.

Ala., Mobile.—Grading is reported to have begun at Volanta, Ala., for the line of the proposed Mobile & Baldwin County Railway Co. It is to be completed to Bay Minette, Ala., by January next. Address P. O. Box 928, Mobile, Ala. M. H. Miller is vice-president, general manager and purchasing agent; P. A. Parker is chief engineer.

Ga., Atlanta.—The Southern Railway, according to a local report, has been authorized by the Circuit Court of Appeals to build spur tracks into the Walker and Mangum streets section, immediately west of its line in Atlanta. Construction is expected to begin within 10 days. B. Herman, Washington, D. C., is chief engineer.

Ga., Elberton.—An officer of the Elberton & Eastern Railway, which has begun operation of its line just completed from Elberton to Tignall, Ga., nearly 22 miles, is quoted saying that an extension from Tignall to Lincolnton, 18 miles, is proposed. W. O. Jones is president and A. Wilson chief engineer, both at Elberton, Ga.

Ga., Macon.—W. E. Dunwoody and Chas. B. Lewis have been appointed as a committee

of the Macon Chamber of Commerce on the plan to build an interurban electric railway from Macon to Perry, Ga., about 30 miles.

Ky., Staford.—The Big Sandy & Kentucky River Railway Co., according to a report quoting an official, has built about 10 miles of its line from Dawkins, Ky., on the Chesapeake & Ohio Railway, south of Staford Station, and in about two months contracts will be let for 15 miles more. Line is to be 35 miles long, from Dawkins to the Licking River via Johnson, Blair, Denver, Patrick, Sherman and Riceville. S. N. Fannin is president and W. H. Dawkins vice-president and general manager, both at Ashland, Ky. Cunningham & Connors of Huntington, W. Va., are engineers.

La., Mandeville.—The Pointevert & Favre Lumber Co., says a report, is obtaining right of way for a railroad 20 miles long from timber lands at Florenville and Pearl River to its mill at Mandeville.

Miss., Tunica.—Col. F. M. Norfleet and several officers of the Yazoo & Mississippi Valley Railroad (Illinois Central system), says a report, have investigated a route proposed for a railroad from Tunica instead of Clayton to Helena, for which right of way has been granted.

Mo., Foristell.—The Foristell, Camp Creek & Northeastern Railroad Co. is reported incorporated with \$30,000 capital stock to construct a line three miles long from Foristell to Camp Creek. Incorporators, E. L. Squire, H. J. Paddock, C. Garcia and K. N. Horwitz.

N. C., North Wilkesboro.—Further particulars concerning the completion of the first section of the Watauga & Yadkin River Railway are given in a report quoting an officer saying that operation of this section of 20½ miles from North Wilkesboro to Grandin, N. C., began July 1. Route via Minton, Goshen, Marley Ford, Goulds, Elkville and Elkville Junction. Company's forces are now extending from Grandin to Lenore, about 20 miles, to the Carolina & Northwest-

ern Railway; also from Elkville via Darby and Boone to Jefferson, N. C., including about 1500 feet of trestling and 1500 feet of tunnels. Maximum grade, 2½ per cent.; maximum curve, 12 degrees. Connection with the Southern Railway at North Wilkesboro. W. J. Grandin, Lenoir, N. C., is president; H. C. Landon is general manager and chief engineer.

N. C., Rockingham.—An official of the proposed Pee Dee Valley Railroad is reported saying that contracts will be awarded in a few days for the projected line from Kolk's, S. C., to Rockingham, N. C., about 21 miles, which will include five trestles; maximum grade 1 per cent. and maximum curve 4 degrees. W. L. Gillespie, Cheraw, S. C., is chief engineer. W. P. McRae is promoting the plan.

N. C., Raleigh.—Grading is reported begun by the Seaboard Air Line west of the Pilot Mills for nine new yard tracks, each half a mile long, and a main track a mile and a half long. W. D. Faucette, Portsmouth, Va., is chief engineer.

Oklahoma, Chickasha.—A. W. Thornley, who is first vice-president of the Ben Hur Oil & Gas Co., says he is interested in promoting plans for an electric railway 50 miles long to connect two towns and through practically level country for the entire distance. Would like to get in touch with parties who can estimate approximately on cost. Charter will be obtained as soon as preliminary survey is made, within the next 30 days. Fort Worth and Dallas (Tex.) parties interested. Address Interurban Company, 419 First National Bank Bldg., Chickasha, Okla.

Oklahoma, Pawhuska.—The Pawhuska & Northeastern Railway Co., capital \$100,000, has been chartered to build lines from Pawhuska to Bartlesville and Ponca City, the total length projected being about 200 miles; incorporators, W. C. Tucker, J. B. Tolson, W. T. Leahy, Chas. F. Stuart, E. J. McCurdy, W. C. Owen, L. F. Roberts, A. W. Hurley and H. H. Brenner, all of Pawhuska, Okla.

S. C., Abbeville.—A meeting of business men is reported to have decided upon the construction of an electric railway connecting McCormick, Abbeville and Due West, about 35 miles, and \$50,000 have been subscribed. The secretary of the Chamber of Commerce at Abbeville may give information.

S. C., Edgefield.—Wm. P. Calhoun, secretary of the Edgefield Chamber of Commerce, says the plan for construction of the Augusta & Edgefield Electric Railway, which is to be from 50 to 60 miles long from Augusta, Ga., via Edgefield to Greenwood, S. C., will be revived and the road built. There is a charter, and arrangements for survey are in the hands of a special committee of the incorporators.

S. C., Florence.—The South Carolina Western Extension Co., capital stock \$25,000, has been chartered to build a line from Florence, S. C., 32 miles, to connect with the Georgetown & Western Railway in Pee Dee township of Florence county. Incorporators are George E. Dargan and D. T. McKelthan, both of Darlington, S. C., and James D. Evans of Florence. The South Carolina Western Railway Co., of which W. R. Bonsal of Hamlet, N. C., is president, is believed to be behind the plan. It has a terminus at Florence.

Tenn., Dayton.—The court is reported to have granted a franchise in Rhea county to J. W. Adams of Chattanooga and associates for a projected electric railway from Chattanooga to Dayton and Knoxville, Tenn., about 113 miles.

Tenn., Knoxville.—The Southern Railway has completed and put in use its branch of 8½ miles to the marble quarries east of Knoxville. J. A. Kreis of Knoxville had the grading contract.

Tenn., Knoxville.—The Knox County Court has granted a franchise for 30 years to the Maryville-Knoxville Interurban Railway Co. and officers have been elected thus: Morton Butler of Chicago, president; John F. Shea of Knoxville, vice-president; Knox Burger of Maryville, treasurer; John M. Clark, also of Maryville, secretary, and they, with J. Parks Vestal of Knoxville, H. C. Carvian of Maryville, are the board of directors. Mr. Butler is also president of the Morton Butler Lumber Co., owning timber land in Blount county, Tennessee. Secretary Clark says survey will begin July 21. Line to be 14 miles through rolling country from Maryville to Knoxville via Rockford, Little River and Vestal, and it will include one bridge 150 feet long and others from 40 to 50 feet long. G. W. Pearsall is locating engineer.

Tenn., Maryville.—A report from Knoxville quotes W. B. Crenshaw, principal assistant engineer there for the Southern Railway, as saying that an agreement has been

attained with the Aluminum Company of America to relocate the proposed line of the Southern Railway for 30 miles between Chilhowee, Tenn., and Fontana, N. C., 250 feet higher than the first route surveyed, the companies to share the expense of the change of location, this being along the Little Tennessee River. This is on the Bushnell-Maryville route under construction for several years. W. H. Wells, Washington, D. C., is chief engineer of construction for the railroad.

Tenn., Memphis.—An officer of the Illinois Central is reported saying that Roper Bros. of Memphis have the contract for grading the second track between Lakeview and Lake Cormorant, Miss., about eight miles.

Tenn., Nashville.—Charter is reported prepared for the proposed Cumberland Valley Interurban Railroad Co. at the office of Rice & Osment, American National Bank Bldg., Nashville, Tenn.; capital stock \$10,000, which may be increased to \$1,000,000. Among those interested are J. H. Cartwright of Gladsville, Tenn.; Homer Hancock, W. G. Beard, J. W. Jenkins, J. J. Jewell, J. W. Leeman, J. B. Moore, H. A. Potter and others. Route is from Nashville via Alexandria, Gladsville and Smithville to Sparta, Tenn., about 50 or 60 miles.

Tenn., Athens.—President J. T. La Rue of the Young Men's Business League is quoted saying that the Texas Short Line Railroad has agreed to build an extension to Martins Mill, and construction will soon begin; also that efforts will be made to obtain a further extension of 11 miles to Athens. T. B. Meeks, Grand Saline, Tex., is president of the railroad.

Tex., Big Springs.—J. J. Fry and others, who are promoting plans for a railroad from Tucumcari, N. M., to San Antonio, Tex., about 600 miles, it is reported, have begun survey out of Big Springs. He represents the Empire Construction Co., Omaha, Neb. (See Manufacturers Record, May 8, 1913.)

Tex., Dallas.—E. P. Turner, who is promoting plans for interurban railroads from Dallas to Cleburne (The Southwestern Traction Co.), and from Dallas to Denton, Tex. (the Northwestern Traction Co.), is reported saying that he is ready to incorporate the Denton line as soon as city ordinance reviving one of the necessary franchises is passed. Preliminary surveys have been made and estimates of construction have been prepared.

Tex., Freeport.—R. B. Loggins, general attorney for the line, Columbia, Tex., says that the Gulf, Freeport & Northern Railroad Co. plans the construction of a road 55 miles long from Freeport to Sealy, Tex., via Brazoria, West Columbia and Damon, Tex. Route over very level and open prairie for most of the way. Date not set for construction bids. C. Davis is president, C. L. Sharp vice-president and general manager, C. E. Clark treasurer, and J. S. Bartlett secretary. (See Manufacturers Record, July 10.)

Tex., Oakwood.—A charter has been approved for the Oakwood & Trinity River Southern Railway Co., which proposes to construct a line from a connection with the International & Great Northern Railroad, in Leon county, south to a point (which has not been definitely decided) in Madison county, about 50 miles; capital stock \$100,000; headquarters at Oakwood, Tex. Incorporators: J. M. Dobie, J. L. Hill, William A. Frisby, J. H. Hille, W. W. Collier and Lee Frisby, all of San Antonio; J. W. Barton, John A. Childress and Lee Knowles, all of Oakwood, and F. S. Streater of Dallas, Tex.

Tex., San Antonio.—Varley P. Brown of San Antonio, president of the San Antonio & Austin Interurban Railway Co., which proposes to build the "Short Line" between the two cities, is quoted saying that the location survey has been completed. It is 75 or 80 miles long. The Southwestern Engineering Co. of San Antonio, W. B. Tuttle, president, did the work. B. G. Silning is vice-president and J. R. Graham locating engineer.

Tex., Temple.—The Temple Northwestern & Gulf Railway Co., says a report, will begin construction immediately, materials having been ordered for 15 miles of track, which will include the grade of the old Temple Northwestern Railroad. There will be two steel bridges over the Leon River. W. S. McGregor of Temple is vice-president and general manager and W. E. Dozier is chief engineer.

W. Va., Fairmont.—With reference to the recent report that surveys are being made for an extension of the Buckhannon & Northern Railroad from Fairmont to Gratton and Belington, W. Va., about 35 miles,

the company says it is not definitely decided to make the extension. Samuel D. Brady, Morgantown, W. Va., is chief engineer.

W. Va., Weston.—The Clarksburg & Western Railway Co. (Monongahela Valley Traction Co.) will, it is reported, complete its extension from Mt. Clare to Weston, 18 miles, by August 15. It is now done as far as Janclew, more than half way.

STREET RAILWAYS

Md., Baltimore.—Both branches of the City Council have passed an ordinance authorizing the construction of a street-railway extension on Callow Ave. for several blocks, and it is expected that the United Railways & Electric Co. will build it. Wm. A. House is president.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

Barrel Machinery.—See "Woodworking Machinery."

Blank Books, etc.—J. H. Norman, Halifax, N. C.—Names and addresses of manufacturers of loose leaf record books and blank books for deeds and mortgages.

Boilers.—Solomon-Norcross Company, 1622 Candler Bldg., Atlanta, Ga.—Prices on boilers for water-works, electric-light plant and sewers at Milton, Fla.

Boiler.—John G. Duncan Company, 308 W. Jackson Ave., Knoxville, Tenn.—Prices on second-hand 60-horse-power furnace, stationary or portable boiler, with fixtures complete, for immediate delivery; 100 pounds cold-water pressure.

Bridge Construction.—Proposals received by Nassau County Board of Commissioners at courthouse, Fernandina, Fla., until August 13 for furnishing all materials and labor and constructing complete, ready for traffic, including pile and timber fenders, plate girder drawbridge, 149 feet; also linear foot basis 600-foot pile and timber approach to same; detail plans and specifications on file at office of Edwin R. Williams, clerk.

Building Materials.—Everybody's Gin Co., R. F. Dempsey, manager, Marlow, Okla. Prices on building materials.

Building Materials.—Ange & Bates, Room 5 Hand Block, Orlando, Fla.—Catalogues and prices from manufacturers of building material.

Building Material.—Solomon-Norcross Company, 1622 Candler Bldg., Atlanta, Ga.—Prices on building material for electric-light plant, water-works and sewers.

Buggy Wheels.—J. L. O. King & Co., Sandy Springs, S. C.—Addresses of manufacturers relative to manufacturing (on royalty basis) expansion buggy wheels.

Cars.—H. W. Goddin, Box 333, Richmond, Va.—Prices on 36-inch dump cars, three or four-yard capacity; state location and price in first letter.

Coal.—Proposals received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until July 22 to furnish at navy-yards, etc., New York, Philadelphia, Washington and Hampton Roads, 621,000 tons, more or less, semi-bituminous steaming coal as required during fiscal year ending June 30, 1914. Applications for proposals should refer to schedule 5640. Blank proposals furnished upon application to bureau. T. J. Cowle, Paymaster-General, U. S. N.

Concrete Mixer.—S. Tate Sterrett, 208 S. 3d St., Richmond, Va.—Prices on (Smith preferred) concrete mixer; state location.

Concrete Blocks.—A. H. France, Gillett, Ark.—Prices on concrete blocks.

Coke Ovens.—Schulter Coal Mining Co., 206 Central National Bank Bldg., Tulsa, Okla.—Opens bids in about three months to construct two or three coke ovens; no details determined.

Dryer.—O. M. Davis, Jr., Box 144, Bristol, Tenn.—Description and prices on dryer for tripple; capacity four tons per hour; second-hand preferred.

Electric Motor Pump.—See "Pump."

Electric-plant Equipment.—Town of Winter Park, Fla., H. E. Cole, superintendent.—Prices on copper wire, transformers, meters, etc.

N. C., Black Mountain.—The Black Mountain Telephone Corporation, which will install an electric-light and power plant, will also, according to a local report, ask a franchise for a street railway to connect Black Mountain Station, Montreat, Ridge Crest and the Blue Ridge Association property.

Tenn., Nashville.—The Nashville Traction Co., recently chartered, is seeking to amend its charter so as to add some lines and extensions to the already proposed routes. The application for amendment is signed by Walter O. Farmer of Nashville, George M. Hendrie, Russell A. Alger, W. Howie Muir and Henry Ledyard, directors.

Tex., El Paso.—The El Paso Electric Railway Co. is seeking a franchise to build an extension out North Oregon St. to the Mesa.

Electrical Equipment.—Solomon-Norcross Company, 1622 Candler Bldg., Atlanta, Ga.—Prices on electrical equipment for electric-light plant, water-works and sewers.

Electrical Machinery.—Morris Mirmow, Orangeburg, S. C.—Prices on gasoline engine and dynamo to supply 150 to 200 lights.

Elevator.—Treasury Department, office of supervising architect, Washington, D. C.—Proposals received until August 6 for electric elevator plant in United States post-office and courthouse at New Orleans, La., in accordance with drawings and specifications, copies of which are obtainable at the office of architects, Hale & Rogers, 11 E. 24th St., New York, or at this office, at discretion of supervising architect.

Elevators.—Elm Grove Cotton Mills, Lincoln, N. C.—Prices on hand and electrically-operated elevators.

Engines.—Solomon-Norcross Company, 1622 Candler Bldg., Atlanta, Ga.—Prices on engines for water-works, electric-light plant and sewers at Milton, Fla.

Engines.—J. L. O. King & Co., Sandy Springs, S. C.—Addresses of manufacturers relative to manufacturing (on royalty basis) gas turbine engines.

Fireproof Partitions, etc.—S. Goodrum, Sweetwater, Tex.—Prices on fireproof partitions, vault doors and frames, metal frames and sash, etc., for courthouse at Crosbyton, Tex.

Fireproofing Material.—Sterling Cotton Mills, Franklinton, N. C.—To correspond with manufacturers of fireproof material (metal laths and plaster) for mill construction 75x50-foot room.

Furnaces (Reverberating).—See "Mining Machinery."

Glass.—O'Dell King, Sandy Springs, S. C.—Addresses of glass manufacturers in vicinity of Greenville and Anderson, S. C.

Glass.—Richard A. Munden, Petersburg, Va.—Prices on prismatic glass for interior lighting.

Grading, etc.—Bids received by Road Commissioners, Second District, Lee county, Tupelo, Miss., until August 1 to grade 36 miles of road; pipe bids opened at same time; L. G. Smith, engineer in charge.

Heating Plant.—L. E. Brubaker, Ensley, Ala.—Prices on furnace for steam-heating plant for \$15,000 church building.

Hoisting Chain.—John G. Duncan Company, 308 W. Jackson Ave., Knoxville, Tenn.—Prices on second-hand hoisting chain (about six-inch length) for hoisting railroad ties and bridge timber from river.

Hoisting Engines.—H. H. Gullit, 201 S. 3d St., Richmond, Va.—Prices on hoisting engines, double drum and double cylinder.

Ice Machinery.—William E. Veasey, Havre de Grace, Md.—Prices on ice machinery for 25-ton plant.

Ice Plant.—R. P. Ray, Spray, N. C.—Prices on ice machinery for 15 to 20-ton plant.

Landscape Architects.—Geo. Herbert Gray and Hermann Wisemeyer, architects, 708 Louisville Trust Bldg., Louisville, Ky.—Correspondence with specialists in colonial landscape.

Laundry Machinery.—R. P. Ray, Spray, N. C.—Prices on machinery for steam laundry; population, 5000 to 10,000.

Lenses and Lens Standards, etc.—Proposals received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until August 4 for furnishing lenses and lens standards and supports for lighthouses, slate urinal and closet stalls and fittings, pillar cranes, switch stands, angle bars, galvanized-steel sheets, steel plates, horseshoes, ratchet braces, shower heads, water coolers, stable brooms, hack-saw blades, paint brushes, airbrake hose, leather, cotton canvas, ship's felt, oakum, vitrified sewer pipe, vitrified tile conduit, chloride of lime, unslaked lime, linseed oil and chrome yellow. Blanks and general information relating to this circular (787) are obtainable from this office or office of assistant purchasing agents, 24 State St., New York; 614 Whitney-Central Bldg., New Orleans; and 1086 North Point St., San Francisco; also from U. S. Engineer offices in Seattle, Los Angeles, Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill., and Commercial Club, Tacoma, Wash. F. C. Boggs, Major, Corps of Engineers, U. S. A., General Purchasing Officer.

Levee Construction.—Proposals in duplicate received at Board of Directors St. Francis Levee District, O. N. Kilgough, president, Marion, Ark., until August 1 for construction of 5,000,000 cubic yards levee work; further information, etc., available on application to B. G. Covington, chief engineer, 664 Randolph Bldg., Memphis, Tenn.

Levee Construction.—Proposals received by directors Plum Bayou Levee District, J. T. Lipscomb, secretary, England, Ark., until July 18 (extended date) for construction of new levee loop; originally located levee was 900 feet long and contained 100,000 cubic yards; alternate location 500 feet long and contains about 86,000 cubic yards; plans and specifications on file at offices of secretary, at England, and of Dickinson & Watkins, engineers, State Bank Bldg., Little Rock, Ark.

Levee Construction.—Office of Board of Commissioners, Atchafalaya Basin Levee District, Port Allen, La.—Proposals received at office of Board of State Engineers, 213 New Orleans Court Bldg., New Orleans, La., until August 8 for construction of following work on right bank of Atchafalaya River: Port Barre South Levee; contents 1,000,000 cubic yards; deposit \$2600; V. M. Lefebvre, president.

Levee Construction.—Board of Commissioners Atchafalaya Basin Levee District, Port Allen, La., will construct following work on right bank of Atchafalaya River: Melville to Krontz Springs levee, enlargement, contents 750,000 cubic yards, deposit \$2000; Lafanache South levee, enlargement, contents 100,000 cubic yards, deposit \$350; bids received until July 17 at office of Board of State Engineers, 213 New Orleans Court Bldg., New Orleans, La.

Levee Construction.—Red River, Atchafalaya and Boeuf Levee District, E. G. Richard, president, Alexandria, La., will construct Simmsport to Atkins Bayou levee on left bank of Atchafalaya River in Ayoelles and St. Landry parishes; new levee and enlargement, contents 1,000,000 cubic yards; deposit \$2600; bids received until July 17 at office of Board of State Engineers, 213 New Orleans Court Bldg., New Orleans, La.

Lighting.—A. H. France, Gillett, Ark.—Prices on lighting for store building.

Lighting Fixtures.—L. E. Brubaker, Ensley, Ala.—Prices on electric fixtures for \$15,000 church building.

Locomotive.—Porterwood Lumber Co., Porterwood, W. Va.—Prices on second-hand Shay locomotive, 38 to 42 tons.

Locomotives.—Seay-Dillard Hardware Co., Blackstone, Va.—Prices on two locomotives to operate on lumber road.

Machine Tools.—Carolina Bridge & Iron Co., C. F. Hankins, president, Lexington, N. C.—Prices on small punches and double angle (rotary base) shears.

Metal Laths.—See "Fireproofing Material."

Metal-working Machinery.—J. F. Stebbins, Zephyrhills, Fla.—Prices on machinery for manufacturing tin cans and screw caps for same; cans to have capacity of from one pint to one gallon and of various shapes.

Mining Machinery.—Schulter Coal Mining Co., 206 Central National Bank Bldg., Tulsa, Okla.—Opens bids on or about August 1 for coal-mining machinery; daily output 300 to 500 tons of coal.

Mining Machinery.—James Hadley, 1116 14th St. N. W., Washington, D. C.—Catalogues and cuts of machinery for handling and separating tin from ore; also of reverberating furnaces.

Motor Cars.—Interurban Company, 419 First National Bank Bldg., Chickasha, Okla. Data and prices on gasoline motor cars for 50-mile railway.

Motor Cars.—C. G. Bradley, general secretary Morgan County Chamber of Commerce, Madison, Ga.—Addresses of manufacturers of gasoline self-propelled railroad cars.

Oils, etc.—Proposals addressed to Board of Awards, James H. Preston, president, Baltimore, Md., received until July 23 at office of Richard Gwinn, City Register, City Hall, for furnishing and delivering 60,000 pounds lubricating oils and greases for water department pumping stations, according to specifications in office of water department; specifications obtainable on application to Ezra B. Whitman, water engineer.

Oil-mill Machinery.—Chowan Cotton Oil & Fertilizer Co., Edenton, N. C.—Correspondence with manufacturers of machinery for cottonseed-oil mill.

Organ.—F. A. Guild, West Palm Beach, Fla.—Addresses of manufacturers of pipe organs.

Paper Bottle Wrappers.—Frank Revson, Revson's Drive and Southern Railroad, Atlanta, Ga.—Addresses of manufacturers of felt paper bottle wrappers.

Paving, etc.—Bids received by Mayor in Council Chamber, Piedmont, W. Va., until July 26 for grading and paving Dixon St. Address The Mayor.

Paving.—Bids received at office of W. H. Lark, secretary District No. 223, care of Little Rock Railway & Electric Co., Little Rock, Ark., until July 22 for paving Park Ave. from 10th to 16th St. and 11th St. from Park Ave. to Wolfe St.; plans and specifications at office of H. Levluson, superintendent of Public Works.

Paving.—Bids received by city of Lexington, Ky., at Hernando Bldg., until July 19 for paving portions of Jefferson, Cedar, West 4th, West Short, East Short, South Spring, 2d and Water Sts., under Ordinances Nos. 94, 95, 96, 97, 136, 113, 114, 120, 112, 2331 and 127; asphalt paving (types A, B and C), creosoted wooden blocks, asphalt block or vitrified brick; J. E. Cassidy, Mayor.

Paving.—Proposals received by City Clerk, Anderson, S. C., until July 30 for constructing 25,000 square yards high-grade paving on Main St. and 75,000 square yards of cheaper grade on residence streets; contractors to furnish specifications for each kind of pavement; W. H. Shearer, City Engineer.

Paving.—Bids received in Council Chamber, Opelika, Ala., July 28 for paving portions of Railroad and South Railroad Ave. and 9th St. with brick pavement; about 30,000 square yards; 5th St. from 1st to Ave. B with hasam compressed brick, about 10,000 square yards; Ave. A from 10th to 7th Sts. with doloway pavement, about 10,000 square yards; Geneva St. with concrete, tarvia or doloway pavement, about 12,000 yards; bids to be according to plans and specifications now on file in office of S. S. Black, City Clerk; J. G. Palmer, Mayor.

Pier.—Department of Public Improvements, Superintendent Harbor Board, Oscar F. Lackey, Harbor Engineer, Baltimore, Md. Proposals received by Board of Awards for furnishing and making repairs to pier at foot of Caroline St. for use of Street Cleaning Department; bids received at office of Richard Gwinn, City Register, City Hall, on or before July 23; drawings and specifications at office of Harbor Engineer.

Piping.—See "Grading, etc."

Piping.—R. C. Rivers, Boon, N. C.—Prices on piping for gravity water system; six inch and less.

Piping, etc.—Geo. S. Niedermeier, chairman natural gas committee, Jefferson, Tex.—To correspond with manufacturers of 6 to 12-inch wrought line pipe and specials for natural gas; probably buy 25 miles piping; also wants to correspond with pipe line contractors.

Printing Machinery.—Coupon Printing Co. of St. Louis, J. Boyle Price, president, 1212 Chemical Bldg., St. Louis, Mo., will install printing machinery.

Pneumatic Tube System.—Treasury Department, office of Oscar Wenderoth, supervising architect, Washington, D. C.—Proposals received until August 11 for pneumatic tube system in United States postoffice at Jersey City, N. J., in accordance with

specifications and drawings, copies of which are obtainable at this office, or at office of custodian at site, at discretion of supervising architect.

Pulverizer.—O. M. Davis, Jr., Box 144, Bristol, Tenn.—Prices and description on pulverizer for tripoli; capacity four tons per hour; second-hand preferred.

Pump.—Town of Ackerman, Miss., B. C. McWhorter, Mayor.—Prices on electric motor pump, 10 horse-power, guaranteed to deliver 150 gallons of water per minute through water mains, distance of one or two miles; contract let August 1.

Pumps.—Solomon-Norcross Company, 1622 Candler Bldg., Atlanta, Ga.—Prices on pumps for water-works, electric-light plant and sewers at Milton, Fla.

Rail.—Seay-Dillard Hardware Co., Blackstone, Va.—Prices on 10 miles of 40-pound rails.

Reinforcing.—Joseph S. Reynolds, 1816 1st St. N. W., Washington, D. C.—Prices on reinforcement for concrete floors, consisting of 1200 feet iron or steel bars, ½ inch by 5 feet 6 inches.

Road Construction.—Bids received by the Board of Revenue of Montgomery county until August 11 at Montgomery, Ala., for graveling of about four miles of Holt's crossing road. Specifications may be had at office of Thomas H. Edwards, County Engineer.

Road Construction.—Leflore County Supervisors, Greenwood, Miss., open bids August 4 for building about 25 miles of road; \$150,000 available; A. R. Bew, clerk.

Road Construction.—Bids received by Highways Commission of Baltimore County at Towson, Md., until August 14 for building section of State-aid road along Warren Rd. between York Turnpike and Franz Store, distance of 1.29 miles; blank forms and specifications, etc., obtainable at office of State-Roads Commission, Garrett Bldg., Baltimore, Md.

Road Construction.—Bids received at clerk's office, Staunton, Va., until July 24 for construction of about five miles macadam road between Waynesboro and Hermitage in Augusta county; plans and specifications on file at office of clerk, at office of engineer, Waynesboro, Va., or at office of P. St. J. Wilson, State Highway Engineer, Richmond, Va.; further information on application to C. L. Scott, Jr., Waynesboro, Va.

Road Construction.—Bids received at clerk's office of Henrico county, Richmond, Va., until July 22 for construction of following roads: Three-Chopt Rd. (macadam), 1 mile; from Seven Pines to Stop 19 (gravel), 4.3 miles; end of Varina Rd. to Dutch Gap Rd. (gravel), 7 miles; New Market Rd., Turkey Island bridge to Dick Atkins (gravel), 1.5 miles; Varina Rd. from J. H. Roney's to Garnett's store (gravel), 2.2 miles; plans and specifications on file in clerk's office; information upon application to P. St. J. Wilson, State Highway Engineer, Richmond, Va.

Road Construction.—Bids addressed to O. W. Conner, president Supervisors District No. 1, Covington county, received until August 4 at Collins, Miss., for 37 miles of road improvement, including bridges and culverts; local gravel will be used; bids invited on entire work, consisting of clearing, grubbing, grading, bridging, surfacing and furnishing all material necessary to complete roads; plans, profiles and specifications at office of chancery clerk and at office of Xavier A. Kramer, engineer, Magnolia, Miss.

Sand.—Edneyville township of Henderson county, Edneyville, N. C., invites bids on sand. Address County Commissioners.

Sawmill.—Seay-Dillard Hardware Co., Blackstone, Va.—Prices on band-saw mill; daily capacity 50,000 feet timber.

Seating.—L. E. Brubaker, Ensley, Ala.—Prices on seating for auditorium of church building to have seating capacity of 400.

Sawmill Feed.—John G. Duncan Company, 38 W. Jackson Ave., Knoxville, Tenn.—Prices on shotgun steam feed for No. 8 sawmill.

Separating Machinery.—See "Mining Machinery."

Sewers.—Department of the Interior, Washington, D. C.—Proposals received in duplicate until August 19 for construction of sanitary sewer system for Platt National Park, Sulphur, Okla., in accordance with drawings and specifications, copies of which, with form of proposal, may be had on application to the department; plans, etc., may also be examined at office of Mayor of Sulphur, and in office of superintendent of Platt National Park; Clement S. Ucker, acting assistant secretary.

Sewers.—City Council, Appalachia, Va., opens bids August 19 for furnishing all ma-

terials and construction of house sewerage system; to include 200 linear feet 10-inch, 3900 linear feet 8-inch and 24,000 linear feet 6-inch tile pipe, together with necessary connections, specials, manholes, excavation, etc.; E. A. Collins, recorder.

Sewers.—Bids received by city of Durant, Okla., until July 18 for furnishing tools, labor and machinery for construction of extension of sanitary sewer system; work includes construction of sanitary mains and laterals, necessary manholes, lampholes, flush tanks, etc., as per plans and specifications on file in offices of City Clerk and Benham Engineering Co., engineer, 436 American National Bank Bldg., Oklahoma City, Okla.; plans and specifications obtainable on payment of \$5 to W. P. Danford, Durant, City Engineer, or Benham Engineering Co.

Sewers.—Bids received until July 21 at office of A. N. Sloan, Commissioner Department of Streets and Sewers, Chattanooga, Tenn., for construction of certain sewers in Tenth Ward.

Sewers.—Passaic Valley Sewerage Commissioners receive bids September 9 at Essex Bldg., Clinton St., Newark, N. J., to construct section 2 of outfall pressure tunnel beneath portion of New York Bay and Jersey City; quantities as follows: Item 1, earth or rock excavation and refilling in tunnel for 14-inch concrete sewer, 15,000 linear feet; item 2, granite masonry in tunnel shafts and terminal chamber of Portland cement mortar, 40,000 cubic yards; item 3, granite masonry facing for terminal in place, 350 cubic yards; item 4, rip-rap at terminal chamber in place, 600 long tons; item 5, cast-iron floor plates, wall castings, pipe specials, etc., in place, 65,000 pounds; item 6, gate valves, 51-inch, with wheel stands, etc., in place, 3 sets; item 7, steel reinforcement for concrete in place, 30,000 pounds; drawing, contract forms, specifications and blank form obtainable at Commissioners' office from William M. Brown, chief engineer; John S. Gibson, clerk.

Stage Equipment.—Morris Mirmow, Orangeburg, S. C.—Prices on curtain and scenery for moving-picture theater.

Steam Shovel.—Harvey Baker, Richmond, Va.—Prices on second-hand steam shovel, one-yard bucket; state make and price in bullet letter.

Steel Bulletin Boards.—Aille E. Dickson, Houston, Tex., Box 1308.—Addresses of manufacturers of pressed steel bulletin boards.

Tank.—M. B. Parker, superintendent construction Southern Car Wheel Iron Co., Tallapoosa, Ga.—Prices on second-hand steel or iron water tank with capacity for 5000 to 10,000 gallons.

Tin.—J. F. Stebbins, Zephyrhills, Fla.—Prices on tin for making cans.

Tunnel Construction.—Passaic Valley Sewerage Commissioners, John S. Gibson, clerk, Essexville, Newark, N. J., receive proposals September 9 to construct section 3 of outfall pressure tunnel beneath portion of Jersey City, Bayonne and Newark Bays; approximate quantities: 2000 linear feet earth or rock excavation and refilling, etc.; 9029 linear feet same work, etc.; 35,000 cubic yards concrete masonry in tunnel, shafts, etc.; 25,000 cubic yards concrete masonry in compressed-air tunnels and shafts, etc.; 40,000 pounds steel reinforcement for concrete, etc.; drawings, contract form, specifications, etc., obtainable at Commissioners' office from Wm. M. Brown, chief engineer.

Vault Door.—See "Fireproof Partitions, etc."

Well-drilling.—M. B. Parker, superintendent construction Southern Car Wheel Iron Co., Tallapoosa, Ga., is interested in bored wells for furnace water supply.

Woodworking Machinery.—C. B. Faris, Pittsview, Ala.—Addresses of manufacturers of barrel and keg-head machinery.

Woodworking Machinery.—William E. Veasey, Havre de Grace, Md.—Prices on engine, resaw planer, cut-off saw, etc., for box and crate factory.

The proceedings of the nineteenth annual session of the Texas Cottonseed Crushers' Association at San Antonio have been published in pamphlet form by the association, of which W. F. Pendleton of Farmersville is president; P. S. Grogan of Houston, vice-president; Robt. Gibson of Dallas, secretary, and J. A. Underwood of Honey Grove, treasurer. With the proceedings are published the constitution and by-laws of the association, and the rules governing transactions in cottonseed products.

BALTIMORE & OHIO DEAL.**President Willard Discusses the Union Pacific's Acquisition of More Stock in the Road.**

President Willard of the Baltimore & Ohio Railroad, in discussing this week the exchange of the stock of his company held by the Pennsylvania Railroad with the Union Pacific Company for its holdings of Southern Pacific stock, and the possible effect of the change upon the Baltimore & Ohio and its policy, said that the Pennsylvania's ownership of Baltimore & Ohio stock had had no effect upon the policy of his railroad whatever. Those Baltimore & Ohio directors who represented the Pennsylvania interests were experienced railroad men, and their advice and suggestions had always been helpful, and in no instance had they sought to exercise their influence detrimentally to the best interest of the Baltimore & Ohio.

His supposition is that the Pennsylvania's men will likely retire from the board in the near future.

In reply to a question as to what effect increased interest by the Union Pacific in the Baltimore & Ohio would likely have upon Baltimore, Mr. Willard replied that it would have no effect whatever, so far as he could foresee. While the Union Pacific Railroad now owns something over 40 per cent. of the entire capital stock of the Baltimore & Ohio Company, and may be said on that account to have substantial control of the road, he pointed out that the Union Pacific for a number of years has had very substantial holdings in his road, and its status as a stockholder has not changed materially.

The traffic relations between the Baltimore & Ohio and Union Pacific companies have been friendly and of a reciprocal nature, and he expects this arrangement to be continued. There is no reason to expect, however, that the Union Pacific will favor Baltimore or the Baltimore & Ohio more than its other possible connections between the East and the West, because if it were to establish preferential relations with the Baltimore & Ohio this would antagonize its other Eastern connections and result in more harm than good to the Union Pacific. The same might be said concerning the Baltimore & Ohio.

"The relations between the two companies no doubt will continue friendly, as they are now," said President Willard, "and I am confident from my personal acquaintanceship with Judge R. S. Lovett, chairman of the executive committee of the Union Pacific Company, that he, on behalf of the Union Pacific, will desire that the Baltimore & Ohio Railroad continue to be operated in such manner as to best serve the communities dependent upon it, as also best serve the property. In other words, Judge Lovett will be in favor, I am sure, of the continuance of the policy which has obtained during the last three years, because that policy has at all times had his approval and endorsement."

"There is no reason to suppose," continued Mr. Willard, "that the Baltimore & Ohio Railroad Company will lose anything by the large exchange of stock ownership, and it is not likely that it will gain anything by the arrangement. Baltimore will continue to be the chief Atlantic port of the Baltimore & Ohio Railroad, and the road will do all it can to develop the interests of the port and of this city. This will not be actuated by sentimental motives only, although it must be admitted that such reasons do exist; but it will do it because it is for the best interests of the property to do so."

Mr. Willard concluded by stating that

he believed the Pennsylvania had been more embarrassed by its ownership of Baltimore & Ohio stock than the Baltimore & Ohio had because of the arrangement, but that whatever the situation may have been in the past, in the future it could be said most emphatically that the Baltimore & Ohio company is an independent property in every sense of the word and free to do whatever seems best for its own development.

Chamber of Commerce in Land Development.

Lagrange, Ga., July 4.

Editor Manufacturers Record:

Under the direction of the Lagrange Chamber of Commerce, a land company has been organized. This organization will take over large tracts of land in the county and subdivide them into farms of 100 acres each. These farms to be located together, and will be known as "neighborhoods." Centrally located in these neighborhoods a schoolhouse will be erected, and on each farm elegant homes and modern barns and outhouses will be erected, with a full water system.

Those entering into a neighborhood will for the first three years agree to farm along the lines of the Chamber of Commerce and under the direction of the land company. This land company will keep on hand a gang of workmen, modern machinery and implements to be used by the farmers during sickness or labor troubles, at cost.

The Chamber of Commerce will conduct a farm department. This department will direct the farming of the entire county, regular bulletins and instructions will be sent out weekly to all interested. All inquiries will be answered as to how and when to do it along the most approved plans. Other farmers and property-owners will be asked to sign an agreement forcing tenants to farm under the direction as outlined by this department. The pledge in part will embody the agreement to plant and cultivate as follows: Four acres of corn, one acre of sorghum and one acre of oats to every plow worked, making the cotton produced all profit if in addition some meat is raised.

Another feature of this department is to hold annually for the next five years a county fair, where ocular demonstrations will be made of the results accrued from the methods used, tremendous premiums will be offered each year as an inducement and to increase the production by these methods, these premiums to be offered for products along general lines, and not for individual matters.

This work and the methods adopted will commence at once and will be steadily pushed forward for the next five years, the value of every acre more than trebling if these methods are adopted and continued.

The company in charge of these developments agrees that while the plans are unique, they are not experimental. It has set out for itself a herculean task, but is determined to put the farming conditions and rural districts of Troup county ahead.

The Chamber of Commerce is under the supervision of a general secretary, who has a corps of able assistants. There are seven departments in the office, each department has a secretary, and are as follows: Land, real estate, fair, promotion associations, publicity and correspondence. The land department has been recently organized. Plans for many other such features are being prepared, and will be announced at the proper time.

E. Y. CLARKE, Secretary.

FINANCIAL NEWS

The MANUFACTURERS RECORD invites information about Southern financial matters. Items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS RECORD,

Baltimore, Md., July 16.

The Baltimore stock market was generally dull during the past week, but at the end of the period there was some manifestation of interest and activity.

In the trading United Railways common sold from 25½ to 26¼; do. income bonds, 61¼ to 62; do. funding 5s, 87 to 86; do. notes, 105; do. 4s, 82¼ to 82½; Consolidated Gas, Electric Light & Power common, 104 to 103; do. preferred, 109 to 108; do. 4½s, 86; Seaboard Air Line preferred, 42¼; Mt. Vernon-Woodberry Cotton Duck 5s, 67 to 68; G. B. S. Brewing common, 1¼; do. 4s, 37 to 37½.

Merchants-Mechanics' Bank stock sold from 32¼ to 32¾; Calvert Bank, 70½; Fidelity & Deposit, 145 to 146; Fidelity Trust, 245; Maryland Casualty, 105.

Other securities were dealt in thus: Baltimore City 4s, 1960, 90; do. do. 1957, 90; do. do. 1961, 89¼ to 90; do. do. 1962, 89¾ to 90; Consolidation Coal stock, 94½ to 96¼; do. convertible 6s, 90¼ to 92; do. refunding 5s, 88; Northern Central Railway stock, 114½; Baltimore Electric 5s, stamped, 97¼ to 98; do. preferred stock, 42; Chicago Railways 5s, 96¾ to 96¼; Detroit United 4½s, 68; Pennsylvania Water & Power common, 60 to 63; do. 5s, 90¼; Georgia, Carolina & Northern 5s, 101; Baltimore, Sparrows Point & Chesapeake 4½s, 93½; Minneapolis & St. Paul joint 5s, 101¼; Maryland Motor Car Insurance Co., 100; Maryland Electric 5s, 96¼; City & Suburban (Washington) 5s, 101¼; Danville Traction & Power 5s, 92 to 92¾; Fairmont & Clarksburg Traction 5s, 90; Houston Oil common, trust certificates, 16; do. preferred do., 59; Knoxville Traction 5s, 101½ to 101¾; Atlantic Coast Line of Connecticut 5s, certificates, 100 to 100¼; Charleston Consolidated Electric 5s, 93; Davidson Chemical 6s, 97; Fairmont Coal 5s, 93½; Minneapolis Gas Light 5s, 96¾; South Bound 5s, 102½ to 102¾; Atlantic Coast Line convertible debenture 4s, 91½; Norfolk & Portsmouth Traction 5s, 87; Seaboard & Roanoke 5s, 102½; Baltimore Traction 5s, 103½; Georgia Pacific 1st, 107½; Central Railway construction 5s, 104¼; Atlantic Coast Line of Connecticut 4s, certificates, 88; Georgia & Alabama Consolidated 5s, 101.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended July 16, 1913.

Railroad Stocks.			
	Par.	Bid.	Asked.
Atlantic Coast of Conn.	100	231	240
Georgia South. & Fla. 1st Pfd.	100	90	
Seaboard Air Line Com.	100	17	18
Seaboard Air Line Pfd.	100	41¼	
United Rys. & Elec. Co.	50	26	26½
Bank Stocks.			
Bank of Baltimore	100	175	185
Bank of Commerce	15	30¼	31¾
Farmers & Merchants	40	45½	
First National	100	145	
Merchants-Mechanics	10	32¼	32¾
Second National	100	210	
Union	100	135	140
Trust, Fidelity and Casualty Stocks.			
Continental Trust	100	212	
Fidelity & Deposit	50	145	146½
Fidelity Trust	100	245	
Maryland Trust	100	114	
Maryland Casualty	25	95½	
Merc. Trust & Dep.	50	159	
Munsey Trust	100	101	
Miscellaneous Stocks.			
Alabama Company Com.	100	6¾	7¼
Baltimore Electric Pfd.	100	41	42¾
Canton Company	100	179	

Con. Gas, Elec. Lt. & P. Com.	100	103	104
Con. Gas, Elec. Lt. & P. Pfd.	100	108	109
Consolidation Coal	100	94	96½
G. B. S. Brewing Co.	100	1¼	

Railroad Bonds.

Alabama Midland 5s.	102	104
Atlantic Coast 1st 4s.	88	
At. Coast Conv. Deben. 4s.	90	91½
At. Coast Conn. 4s, Cfs.	86½	90
At. Coast Conn. 5s, Cfs.	102	
At. Coast S. C. 4s.	87½	89
Carolina Central 4s.	86	
Coal & Iron Railway 5s.	97½	100
Florida Cen. & Pen. 5s.	100¼	101
Georgia & Alabama 5s.	101	102½
Ga. Car. & North. 1st 5s.	101	101½
Georgia Pacific 1st 6s.	107	109
Ga. South. & Fla. 1st 5s.	101½	101½
Macon, Dublin & Sav. 5s.	89½	
Maryland & Penna. 4s.	88	
New Orleans Gt. Nor. 5s.	64	66
New Orleans M. & C. 5s.	49¼	51
Potomac Valley 1st 5s.	100¼	
Roanoke & Norfolk 5s.	80	81
Seaboard & Roanoke 5s.	102¼	102¾
South Bound 5s.	102	
Suffolk & Carolina 5s.	95	97½
Western Maryland 4s.	76½	77½
Western N. C. Con. 6s.	109	109½
Wash., Balto. & Annap. 5s.	81	83

Street Railway Bonds.

Anacostia & Potomac 5s.	98	99
Augusta Railway & Electric 5s.	102	
Balto. Sp. Tr. & C. 4½s.	92½	95
Baltimore Traction 1st 5s.	101	103½
Balto. Traction (N. B.) 1st 5s.	103½	104½
Central Railway (Balto.) Con. 5s.	100	104½
Charleston City Railway 5s.	99½	103½
Charleston Con. Electric 5s.	92	
City & Suburban 5s (Balto.).	102	
City & Suburban 5s (Wash.).	100	104
Danville Traction 5s.	92½	
Fairmont & Clarksburg Traction 5s.	99	100
Knoxville Traction 5s.	100½	101½
Macon Railway & Light 5s.	94½	97½
Maryland Electric Railways 5s.	96¼	96¾
Memphis Street Railway 5s.	92½	96
Newport News & Old Point 5s.	91½	96
Norfolk & At. Ter. 5s.	92	93
Norfolk & Portsmouth Traction 5s.	88	
Norfolk Railway & Light 5s.	96½	98½
Norfolk Street Railway 5s.	101	
United Railways 1st 4s.	82½	82¾
United Railways Income 4s.	61½	62½
United Railways Funding 5s.	86	
United Railways 5s Notes.	194	195
Virginian Railway & P. 5s.	94½	

Miscellaneous Bonds.

Ala. Cen. Coal & Iron 5s.	72	75
Baltimore Electric 5s, 8½p.	97¼	98
Belvedere Hotel 1st 5s.	100	
Consolidated Gas 5s.	104½	
Consolidated Gas 4½s.	92	93½
Con. Gas, Elec. Lt. & P. 4½s.	85	86½
Consolidation Coal Conv. 6s.	98½	99
Consolidation Coal Refd. 5s.	92½	94½
Fairmont Coal 1st 5s.	97	98
G. B. S. Brewing 1st 4s.	27	28
G. B. S. Brewing Inc. 4s.	4	10
Jamison Coal & Coke 5s.	88	
J. Spencer Turner Deb. 6s.	91	
Maryland Steel Co. 5s.	90	
Mt. Vernon-Woodberry Cotton Duck 5s.	67½	68½
Penna. W. & P. 5s.	89	90½

Investment Bankers.

Secretary Frederick R. Fenton of the Investment Bankers' Association of America has mailed to the membership of the association a 50-page bulletin which contains information of value to investment bankers in this country. The bulletin supplements former issues and brings up to date many State legislative conditions affecting the purchase and sale of investment securities. The survey of the association as set forth in this bulletin treats with the 18 "blue sky" laws that have been enacted in the various States, and includes a comprehensive tabulated summary of the requirements of each act, printing in full all the laws passed recently on this subject. The proposed income tax law and a timely discussion of the German methods of regulating the purchase and sale of securities also form part of the current bulletin. Definite arrangements have not yet been announced, but the tentative dates of October 28-30 have been fixed and are expected to be decided upon for the second annual convention at Chicago.

Mercantile Trust Statement.

The financial statement of the Mercantile Trust & Deposit Co. of Baltimore for June 30 has been issued, showing total resources of \$13,801,985.61. Its deposits are \$9,661,913.39; loans on approved collateral total \$4,592,616.55; cash on hand and in banks, \$2,516,869.71; Baltimore city stock, \$2,490,836.08, and other stocks and bonds \$3,478,715.03. Capital stock is \$1,500,000; surplus, \$2,700,000, and undivided profits, \$533,402.05. The market value of "other stocks and bonds" is given as \$3,538,715.06. The company

says it is its policy to provide for all depreciation of securities when statements are published; also that in view of the enormous shrinkage during the past six months in the very best forms of securities, it is gratifying to know that it was able to meet this depreciation out of its current earnings, pay a 7 per cent. semi-annual dividend, make a substantial addition to undivided profits, and carry over its securities some \$60,000 less than their market value. A. H. S. Post is president; Wilton Snowden, J. R. Walker and F. G. Boyce, Jr., vice-presidents; John McHenry, treasurer; T. H. Fitchett, secretary and assistant treasurer, and C. I. Reynolds, assistant secretary. Walter B. Brooks is chairman of the executive committee.

FINANCIAL CORPORATIONS.

Ala., Birmingham.—The W. B. Leedy Real Estate & Insurance Co. is incorporated with \$25,000 capital; W. B. Leedy, president; John S. Leedy, vice-president; W. B. Leedy, Jr., secretary, and W. B. Coldwell, treasurer.

Ala., Birmingham.—The Bankers' Mortgage Bond Co., capital \$500, is organized with J. H. Hard, Jr., president; E. B. Irwin, vice-president, and J. H. Barker, secretary and treasurer.

Ala., Boaz.—The People's Bank of Boaz, capital \$10,000, is reported organized by W. H. Bartlett, Joseph Creel, R. E. Boroughs, Dr. W. T. Gillespie, E. M. Looney, Dr. Earl Noel, A. E. Archer, W. B. Shadrick, L. O. Cox.

Ala., Enterprise.—The Farmers & Merchants' National Bank, which is a conversion of the Farmers & Merchants' Bank, is chartered; capital \$50,000; H. M. Sessions, president; L. H. Sessions, cashier.

Fla., Miami.—The Young Men's Investment Co., incorporated with \$10,000 capital, is now doing business under a trustee, with temporary offices at 1120 Ave. C. J. C. Brosier is president. (See Manufacturers Record, July 10.)

Ky., Whitesburg.—The First National Bank of Whitesburg is approved; capital \$25,000; organizers, J. D. Fitzpatrick, J. M. Day, S. G. Fairchild, G. M. Adams and D. Hays.

Miss., Heidelberg.—Local parties are reported organizing a new bank with \$10,000 capital.

Mo., Moberly.—A new bank is reported being organized with A. Vince president, R. A. Curran vice-president, and J. W. Bundridge cashier.

Mo., Sedalia.—The Union Savings Bank incorporated; capital \$10,000; S. M. Williams is president, W. M. Wheeler vice-president, M. F. Ehlers cashier, S. D. McVey secretary; directors, Fred Gehlken, C. W. Estabrook and A. J. White. Business began July 15.

Mo., Swedeborg.—The Bank of Swedeborg is reported being organized by R. B. Stewart, S. C. Black, W. Warner, J. P. Kreitzer, L. E. Royle and Levi Lundstrom.

Mo., Vichy.—The Citizens' State Bank of Vichy is chartered; capital \$10,000, with \$500 paid up; incorporators, D. N. Gardner, Dr. E. B. Bowles, C. A. Love and others.

S. C., Columbia.—Parham-Thomas-McSwain, Inc., of Columbia have been granted a commission to do a general insurance business; capital \$10,000; petitioners, F. J. Parham, Roy Z. Thomas and W. A. McSwain of Columbia.

N. C., Burlington.—The Standard Realty & Security Co. of Burlington is chartered; authorized capital, \$100,000, with \$1000 paid in; incorporators, C. C. Fonville, W. P. Lawrence, J. H. Brooks, C. V. Sellers, W. R. Sellers and B. R. Sellers.

Okla., Briggs.—The First National Bank of Briggs has made application to organize; capital \$25,000; organizers, Henry Lytal, S. W. Garrett, L. W. Duncan, F. C. Hubbard, A. E. Ramsay.

S. C., Charleston.—The Home Friendly Insurance Co., which takes over the South Carolina business of the Home Friendly Society, is chartered; capital \$50,000; surplus \$10,000. W. R. Thompson is president and treasurer, W. W. McVey secretary, N. B. Barnwell general counsel; directors, R. G. Rhett, T. T. Hyde, D. C. Heyward, N. B. Barnwell, J. C. H. Wulbern, F. G. Ravenel, A. R. Ringheimer, W. R. Thompson and J. S. Pinkusohn. Business began June 30.

Tenn., Pocatontas.—The Bank of Pocatontas, capitalized at \$10,000, is reported organized

ized by H. P. Webb of the Farmers' State Bank of Milan and W. A. Lyles of the Bank of Williston, Tenn.; R. E. Shea will be president, W. B. Gooch vice-president and J. R. Manly cashier.

Tex., Bogota.—The First National Bank of Bogota has made application to organize; capital \$25,000; organizers, T. P. Guest, J. L. Vandyke, Isaac Guest, Sr., H. C. Bailey, W. T. Norris, J. R. Harvey, John Harvey.

Tex., Freeport.—The Freeport National Bank is chartered; capital \$50,000; S. M. Swenson, president; George C. Morris, cashier.

Tex., Sealy.—The Farmers' National Bank of Sealy will begin business about August 10; capital \$25,000; surplus \$2500; W. F. Viereck, president; G. W. Buller and Max Sailer, vice-presidents; E. L. Gallia, cashier.

Okla., Tishomingo.—The American State Bank of Tishomingo has made application to convert into the Farmers' National Bank of Tishomingo; capital \$30,000.

S. C., Charleston.—The Fidelity Investment Co. of Charleston has been granted a commission; capital \$30,000; organizers, T. T. Hyde, R. C. Richardson, R. S. Whaley and Nath'l B. Barnwell.

Tex., Childress.—The Commercial Securities & Title Co. is chartered; capital \$25,000; incorporators, E. R. Biggs, B. M. Carter and J. M. Crews.

Tex., Krum.—Chartered: First National Bank of Krum, Tex.; capital \$25,000; W. H. Hobbs, president; Moses L. Littleton, cashier.

Tex., Texas City.—The Southwestern Trust Co. is reported being organized at Texas City with \$50,000 capital; C. D. Gustavus, president; H. B. Moore, vice-president; E. D. Smith, secretary and treasurer.

Tex., Wadsworth.—A State bank capitalized at \$15,000 is being organized by T. J. Poole, Hy Rugeley, W. J. Gaines, A. D. Thompson and Raymond Cookenboo of Bay City, and Goodwin Stern and George B. Culver of Matagorda.

Va., New Hope.—The Bank of New Hope, capital \$20,000, has begun business. Directors: H. G. Baylor of Harrison, president; A. C. Borden of Waynesboro, vice-president; W. F. Fretwell of New Hope, cashier; A. B. Early, J. W. Wright, J. F. Miller, C. A. Alexander, Samuel Yount and T. C. Miller.

Va., Rosslyn.—The Arlington Trust Co. is chartered; capital \$50,000 to \$100,000; E. Willey Stearns, president, Washington, D. C.; W. C. Wilbirt, vice-president, Arlington, Va.; C. T. Merchant, secretary and treasurer, Washington, D. C.

NEW SECURITIES.

Ala., Mobile.—Voted: \$150,000 of 5 per cent. 30-year school bonds. Lazarus Schwartz is Mayor.

Ark., Conway.—Hendrix College has purchased at 97 \$44,000 of 6 per cent. bonds of Sewer Improvement District No. 1 of Conway; denomination \$500.

Fla., Bartow.—Bids will be received until 2 P. M. August 11 for \$50,000 of 5 per cent. 20-year bonds of special tax school district No. 1, Polk county. Address J. C. Owens, Board of Public Instruction of Polk County. Further particulars will be found in the advertising columns.

Fla., Dade City.—Pasco county contemplates issuing \$350,000 of road bonds.

Fla., Daytona Beach.—July 21 an election is to be held to vote on \$20,000 of water-works bonds.

Fla., Fort Myers.—An election is to be held in Lee county to vote on \$200,000 of good roads bonds.

Fla., Starke.—Voted: \$30,000 of 6 per cent. school bonds. Dr. T. D. Gunter is chairman, Board of School Trustees.

Fla., Winter Park.—The \$10,000 7 per cent. electric-light bonds are being offered at private sale; denomination \$500. Address H. A. Ward, chairman finance committee.

Ga., Albany.—The \$100,000 of bonds to be voted on July 24 are for the following purposes: \$24,500, sewer; \$40,000, school; \$12,500 paving; \$12,000, water main; \$5000, fire apparatus; \$5000, cemetery. J. T. Mannis is City Attorney.

Ga., Augusta.—All bids received July 10 for \$250,000 of levee bonds were rejected. Wm. Lyon Martin is clerk of Council.

Ga., Blackshear.—Judge T. A. Parker has validated \$15,000 of public improvement bonds.

Ga., Jackson.—Voted: \$23,000 of 5 per cent. sewer bonds. Denomination \$1000; dated January 1, 1914. W. E. Watkins is Mayor.

Ga., Lagrange.—All bids received June 24 for \$55,000 of 4½ per cent. school bonds were rejected. T. J. Harwell is city clerk.

Ga., Macon.—A bill has been introduced in the Legislature providing for an election in Bibb county to vote on \$500,000 of courthouse and \$500,000 of school bonds.

Ga., Summerville.—The sale of \$18,500 of 6 per cent. school district bonds offered July 10 has been postponed indefinitely.

Ky., Newport.—No sale was made July 7 of the \$50,000 of 4 per cent. 30-year street-improvement bonds, and the securities will now be sold over the counter. W. A. Elmer is Finance Commissioner.

La., Alexandria.—August 19 an election is to be held to vote on \$40,000 of 5 per cent. 40-year sewerage, paving and drainage bonds.

La., Hammond.—Steps are being taken to call an election to vote on school bonds.

La., Lafayette.—August 19 an election is to be held to vote on \$100,000 of 5 per cent. bonds of Lafayette parish first drainage district.

La., Lake Charles.—The election called for August 21 is for the purpose of voting on \$900,000 of 5 per cent. 25-year Calcasieu parish road bonds.

La., New Orleans.—Ohio investors are reported to have purchased \$175,000 of drainage bonds of sub-drainage district No. 1.

Md., Westernport.—Bids will be received until 6 P. M. August 12 for \$75,000 of water, \$10,000 for paving, \$10,000 of sewer and \$5000 of bridge 5 per cent. 30-year bonds, voted September 27, 1910; denomination \$500; dated May 1, 1911. M. J. Ward is Mayor and O. H. Bruce clerk.

Miss., Batesville.—The Board of Mayor and Aldermen will, on July 15, sell \$4500 of school, and on July 28 \$18,000 of water-works 6 per cent. 20-year bonds. J. B. Carothers is clerk.

Miss., Brandon.—Bids will be opened on August 4 for \$10,000 of 6 per cent. 20-year Consolidated School District, Rankin county, bonds; denomination \$500. Address T. L. Guy.

Miss., Columbus.—The Board of Supervisors of Lowndes county has negotiated the sale of \$50,000 of road bonds of district No. 2 and parts of other districts.

Miss., Fulton.—Bids will be received by T. A. Senter, chancery clerk, Itawamba county, for \$25,000 of 6 per cent. road district bonds, composed of the Fifth and parts of the Second and Third Supervisors districts; dated July 1, 1913. Further particulars will be found in the advertising columns.

Miss., Georgetown.—In about 30 days city will sell \$7500 of water-works bonds. D. Mahaffey is city clerk.

Miss., Grenada.—Bids will be received until 4 P. M. August 5 by the Mayor and Board of Aldermen for \$25,000 of 5 per cent. 20-year municipal bonds. L. B. James is City Recorder. Further particulars will be found in the advertising columns.

Miss., Greenwood.—Bids will be received on August 4 by the Board of Supervisors of Leflore county for \$100,000 of 5 per cent. improvement bonds. A. R. Bew is clerk. Further particulars will be found in the advertising columns.

Miss., Magnolia.—No sale was made July 7 of the \$300,000 of 5½ per cent. 25-year road bonds. Address Board of Supervisors of Pike county, Charles E. Brumfield, clerk.

Miss., Meridian.—The sale of \$175,000 of 5 per cent. city bonds to the New York Life Insurance Co. is reported consummated. John W. Parker is Mayor.

Miss., New Albany.—Bids will be received until 7:30 P. M. August 5 for \$30,000 of 5 per cent. water-works, streets and city jail bonds; denomination, 100 bonds of \$100 each, payable five each year till all are paid; 40 bonds of \$500 each, payable at the end of 20 years. W. S. Parks is Mayor and S. W. Bevil city clerk. Further particulars will be found in the advertising columns.

Miss., Booneville.—The Bank of Booneville has purchased \$40,000 of 6 per cent. Prentiss county road bonds.

Miss., Tupelo.—Lee county will issue \$390,000 of 5½ per cent. road bonds.

Mo., Albany.—A. G. Edwards & Sons, St. Louis, have purchased \$19,000 of 6 per cent. 5-20-year electric-light bonds at a premium of \$328.

Mo., Carl Junction.—J. R. Sutherland & Co. of Kansas City have purchased at par \$13,000 of 5 per cent. 10-20-year school district building bonds. C. W. Roney is district clerk.

Mo., Cartersville.—Voted: \$42,000 of city hall construction bonds.

Mo., Joplin.—The sale of the \$50,000 of 5 per cent. 5-20-year viaduct bonds to a St. Louis firm was not consummated, and the bonds have been resold to local banks. R. E. Jones is City Treasurer.

Mo., Sarcoxie.—Whitaker & Co., St. Louis, have purchased \$25,000 of 6 per cent. special road district bonds.

Mo., Springfield.—Bids will be received until 10 A. M. July 15 for \$50,000 of 7 per cent. current expense bonds; dated July 1, 1913; maturity February 1, 1914. G. W. Culler is Mayor and J. H. Langston City Clerk.

Mo., St. Louis.—An election is to be held in the fall to vote on \$500,000 of bridge bonds.

N. C., Edneyville, P. O. Bear Wallow.—Voted: \$12,000 of 6 per cent. 30-year good roads bonds. Commissioners of Henderson county are asking bids for same.

N. C., Charlotte.—Bids will be received until 11 A. M. August 9 for not less than \$95,000 nor more than \$110,000 of 4½ per cent. 30-year Mecklenburg county special improvement bonds; denomination \$1000; dated September 1, 1913; maturity September 1, 1943. Address W. M. Long, chairman Board of Commissioners of Mecklenburg County. W. F. Stevens is clerk to the board.

N. C., East Spencer.—The School Board is taking steps to issue \$10,000 of school bonds.

N. C., Franklinton.—Bids will be received until 4 P. M. July 25 for \$20,000 of 6 per cent. 30-year Franklinton township road bonds; dated July 1, 1913; maturity July 1, 1943. B. T. Green is secretary.

N. C., Graham.—Bids will be received until 2 P. M. August 2 for \$50,000 of 5 per cent. 50-year improvement bonds. Address R. G. Foster, secretary. Wm. I. Ward is Mayor. Further particulars will be found in the advertising columns.

N. C., Greensboro.—August 12 an election is to be held in Morehead township, Guilford county, to vote on \$10,000 of special school district bonds. Address County Commissioners.

N. C., High Point.—All bids received July 7 for the \$100,000 of 5 per cent. 30-year water, sewer and school bonds were rejected. Fred N. Tate is Mayor.

N. C., Littleton.—September 16 an election is to be held in Warren county to vote on \$200,000 of road bonds.

N. C., Meadows.—Bids will be received until 2 P. M. September 10 for \$10,000 of 5 per cent. 30-year permanent roads bonds of Meadows township, Stokes county. Address W. R. Petree, secretary, Germantown, N. C., Route 1. Further particulars will be found in the advertising columns.

N. C., Mooresville.—Voted: \$65,000 of sewerage, water and street improvement bonds.

N. C., Saluda.—Bids will be opened by July 25 for \$10,000 of sewer, water and light bonds voted July 9; interest not to exceed 6 per cent. Address John Pace, Mayor.

N. C., Selma.—Bids will be received until July 25 for \$10,000 of 6 per cent. 30-year improvement bonds. M. F. Jordan is Mayor at Selma and L. H. Alfred, attorney, Smithfield, N. C. Further particulars will be found in the advertising columns.

N. C., Shelby.—Spitzer, Rorick & Co., Toledo, have purchased \$108,000 of bonds of Buffalo Drainage District No. 1.

N. C., Wilmington.—Bids are to be asked for \$75,000 of school and \$50,000 of road 4½ per cent. 25-year bonds. Address Board of County Commissioners of New Hanover County.

N. C., Wilson.—Voted: \$30,000 of railroad-bond bonds.

Okla., Bartlesville.—Defeated: \$7500 of garbage disposal bonds. W. W. Jones is Commissioner of Finance and Supplies.

Okla., Norman.—R. J. Edwards of Oklahoma City has purchased at par \$30,000 of 6 per cent. 20-year refunding bonds.

Okla., Newkirk.—Bids will be received at any time by E. E. Wood, clerk, Board of Education, for \$50,000 of 5 per cent. 25-year high school bonds. Denomination \$500.

Okla., Tulsa.—Bids were received until 10 o'clock July 15 for \$16,000 of 6 per cent. 10-25-year road improvement bonds. Address Harry S. Hall, care R. E. Curran.

Okla., Tulsa.—The Board of Education is taking steps to hold an election to vote on school bonds.

S. C., Florence.—August 5 Florence county will vote on \$500,000 of good roads bonds.

S. C., Laurens.—Bids will be received until noon July 22 for \$7200 of district No. 16 6 per cent. 20-year school bonds. Denomination

[For Additional Financial News, See Page 78.]

Merchants-Mechanics National Bank

South and Water Sts., BALTIMORE, MD.
DOUGLAS H. THOMAS, President
JNO B RAMSAY, V.-P. and Chm. Bd. of Dir.
WM INGLE, Vice-President.
JOHN B. H. DUNN, Cashier.
Capital \$2,000,000 Deposits \$21,670,000
Surplus and Profits \$2,175,000

Accounts of Banks, Bankers, Corporations and Individuals solicited.

We invite correspondence.

The First National Bank

OF KEY WEST, FLA.
United States Depository and Disbursing Agent
Capital - - - \$100,000
Surplus and Undivided Profits - - 40,000
A general banking business transacted.
Special attention given to collections.

INVESTMENT SECURITIES

Southern Stocks and Bonds
Municipal and Corporation
Cotton Mill Stock a Specialty
WM. S. GLENN, Broker, SPARTANBURG, S. C.

JOHN NUVEEN & CO.

First National Bank Building
CHICAGO
We purchase SCHOOL COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.
Write us if you have bonds for sale.

Delaware Trust Company

Wilmington, Delaware
INCORPORATING under broad, liberal, safe and stable Delaware laws. A fully equipped department for proper organization and registration of corporations.
BANKING AND TRUST department gives special attention to out of town customers accounts.
TITLE DEPARTMENT examines and guarantees title to realty throughout Delaware.
REALTY DEPARTMENT has sites for manufacturing industries. Modern Methods of management of property.
J. ERNEST SMITH, President and Gen. Counsel.
WM. G. TAYLOR, Vice-Pres. and Treasurer.
HARRY W. DAVIS, Vice-Pres. and Secretary.
W. W. PUSEY 2d, Title and Real Estate Officer.

GO SOUTH!

FOR SALE Timber, Coal, Iron, Ranch, Phosphate, Other Properties, Southern States, West Indies, Mexico
SOUTHERN STATES DEVELOPMENT CO.
(Brokers) GEO. B. EDWARDS, Pres.
Tribune Building, NEW YORK, N. Y.
Negotiations, Investigations, Settlements, Purchases of Property, Information.

CHARLES L. HEHL, C. P. A., President
JOHN KÜCHLER, C. P. A., Vice-President.

H. B. Wilcox, Pres. Blanchard Randall, V.-Pres.
Wm. S. Hammond, Cashier
Saml. W. Tschudi, A. Cash. R. E. Bolling, A. Cash.

The First National Bank

17 South St., Baltimore, Md.
Capital, - - - \$1,000,000
Surplus and Net Profits, - 400,000
Deposits, - - - 6,500,000

Especially well equipped to handle the business of Southern Banks, Corporations, and Individuals and Manufacturers. We cordially invite correspondence and interviews.

The National Exchange Bank

OF BALTIMORE, MD.
Hopkins Place, German and Liberty Streets
Capital, \$1,000,000
July 15th, 1908, Surplus and Profits, \$671,631.60
OFFICERS
WALDO NEWCOMER, President.
SUMMERFIELD PALDWIN, Vice-Pres.
R. VINTON LANSDALE, Cashier.
C. G. MORGAN, Asst. Cashier.
Accounts of Mercantile Firms, Corporations, Banks, Bankers and Individuals invited

SURETY BONDS**Fidelity & Deposit Co.**

OF MARYLAND
Home Office, - - BALTIMORE, MD.
Total Assets Dec. 31, 1911,
\$8,133,000.57

Pioneer Surety Co. of the South.
Becomes Surety on bonds of every description.

AGENTS IN ALL PRINCIPAL CITIES
Harry Nicodemus, Sec'y and Treas.
Edwin Warfield, President

Southern Steam Railroad Securities

DEALT IN
F. J. LISMAN & CO.

Specialists in Steam R. R. Securities
Members New York Stock Exchange
30 Broad Street NEW YORK
39 Pearl Street, Hartford
Land Title & Trust Bldg., Philadelphia

WE BUY

Municipal Bonds
From Municipalities and Contractors. Write us if you have entire bond issues for sale.

SEASONGOOD & MAYER
CINCINNATI, OHIO

ELMER L. HATTER, C. P. A., Treasurer
ERNEST E. WOODEN, C. P. A., Secretary

BALTIMORE AUDIT COMPANY

1027-1033 Calvert Building BALTIMORE, MD.
BRANCH—Monticello Arcade Building, Norfolk, Va.

FREIGHT BROKERS FORWARDING AGENTS

Shipments of C. L. and L. C. L. Forwarded to Interior Points
CONSIGNMENTS SOLICITED

HOWARD & COMPANY

PORT OF SAVANNAH

WE BUY City, County, School and Drainage BONDS

FROM MUNICIPALITIES OR CONTRACTORS

We are in position to pay HIGHEST PRICES. Write or wire us your offerings.

THE NEW FIRST NATIONAL BANK, Assets, \$6,000,000 Columbus, Ohio

To Manufacturers and Capitalists

Contemplating the Establishment of Industrial Enterprises

Attention is called to the exceptionally favorable location of

NEWPORT NEWS, VA.

on Hampton Roads, fifteen miles from the sea. Deep water, railway and sea transportation facilities unrivaled. Climate salubrious. Apply to

W. B. LIVEZEY, President

OLD DOMINION LAND COMPANY
NEWPORT NEWS, VA.

Municipal Bonds Purchased

Correspondence invited from Investors wishing to sell their holdings of seasoned marketable Municipal Bonds, and from municipal officials and contractors in connection with entire new issues.

N. W. HALSEY & CO.

49 Wall Street, New York

PHILADELPHIA

CHICAGO

SAN FRANCISCO

Are You Sure of Your Profits?

Right now your books should be Audited by Certified Public Accountants

FACTORY COST SPECIALISTS

INTERSTATE AUDIT COMPANY

ACCOUNTANTS AND AUDITORS

P. W. ROBERTSON, Pres.
Certified Public Accountant.

WASHINGTON, D. C.

Securities Corporation General

1338 Chestnut Street, Philadelphia
111 Broadway, New York

Authorized Capital
\$10,000,000

Issued
\$4,853,125

Deals and invests in public service securities.
Participates in security underwritings.
Finances public service enterprises.

P. M. CHANDLER, President
W. H. SHARP, Vice-President
G. W. ROBERTSON, Vice-President
J. K. TRIMBLE, Sec'y & Treas.

DIRECTORS:

CALDWELL HARDY, Norfolk, Va.
ALEXANDER J. HEMPHILL, New York
HOWARD A. LOEB, Philadelphia
S. Z. MITCHELL, New York
FERGUS REID, Norfolk, Va.
GEO. W. ROBERTSON, Shamokin, Pa.

F. W. ROEBLING, Jr., Trenton, N. J.
W. H. SHARP, Philadelphia
EDW. D. TOLAND, Philadelphia
J. G. WHITE, New York
P. M. CHANDLER, Philadelphia
F. T. CHANDLER, Philadelphia

**Palmetto National Bank**

COLUMBIA, S. C.

Capital
\$250,000.00

Deposits
\$2,700,000.00

Surplus and Profits
\$150,000.00

WILIE JONES, President
JOHN JACOB SEIBELS,
Vice-President
THOMAS TAYLOR,
2nd Vice-President

J. P. MATTHEWS, Cashier
WM. M. GIBBS, Jr.,
Asst. Cashier
WESTON & AYCOCK,
Solicitors

Direct daily connection with every banking point in South Carolina.

28 YEARS' ACTIVE SERVICE

STATE, CITY AND CORPORATION FINANCING
Entire Issues Bought and Sold

Mercantile Trust & Deposit Company

OF BALTIMORE

Capital - - - \$1,500,000
Surplus - - - \$3,000,000

Thoroughly organized to exercise all Banking and Trust Company functions.
Correspondent for Banks and Trust Companies.

A. H. S. POST - - President

\$500. Dated July 1, 1913. Address B. R. Fuller, secretary. Board of Trustees.

S. C., Laurens.—Bids will be received until noon July 22 for \$4000 of 6 per cent. 20-year bonds of school district No. 17. Laurens county. Denomination \$500. Dated July 1, 1913. Address W. A. Baldwin, secretary. Board of Trustees.

S. C., Mountville.—Bids will be opened on July 22 for \$7200 of 6 per cent. 20-year school district bonds; denomination \$500. Bonds were voted June 14. Address B. R. Fuller.

S. C., Spartanburg.—Voted: \$100,000 of street paving and sidewalks bonds. O. L. Johnson is Mayor.

Tenn., Alamo.—The election held last April, when \$12,000 of high-school bonds were voted, has been declared void and another election is to be called.

Tenn., Centerville.—Bids will be received until July 25 for \$17,500 of 5 per cent. 5-20-year Hickman county bridge bonds. Address T. Sawyer, clerk, county court.

Tenn., Chattanooga.—The Volunteer State Life Insurance Co. has purchased at par, accrued interest and premium of \$16.34 the \$617.28 of bonds of paving district No. 178.

Tenn., Dandridge.—Jefferson county has for sale \$150,000 of 5 per cent. 20-30-year road and bridge bonds, voted April, 1913; denomination \$1000. Address Arthur Holtsinger.

Tenn., Henderson.—Robert Lassiter of Oxford has purchased \$50,000 of an issue of \$100,000 of city improvement bonds.

Tenn., Huntington.—Bids will be received until July 20 for \$5000 of street improvement and \$5000 of school dormitory 6 per cent. 20-year bonds, voted July 2.

Tenn., Jasper.—Defeated: \$50,000 of Marion county school bonds.

Tenn., Lawrenceburg.—Voted: \$15,000 of 5 per cent. 10-15-year Lawrence county school building bonds.

Tenn., Loudon.—The Loudon County Court has ordered the sale of \$150,000 of 5 per cent. 30-year road bonds.

Tenn., Loudon.—Bids will be received until 10 A. M. August 11 for \$150,000 of 10-30-year Loudon county road bonds. C. H. Bacon is chairman, Pike Commissioners.

Tenn., Rockwood.—No sale was made June 28 of the \$40,000 of 5 per cent. school bonds. J. D. Tanner is secretary. Bond Commissioners.

Tenn., Sevierville.—Sam R. Rambo of Knoxville has purchased at par \$28,000 of 5 per cent. Sevier county refunding bonds.

Tex., Austin.—The Attorney-General has approved the following securities: \$8500 of 5 per cent. 20-40-year bonds of Angellina county common school district No. 41; \$1000 of 5 per cent. 20-year bonds of Howard county common school district No. 4; \$5000 of 5 per cent. 10-20-year bonds of Matagorda county common school district No. 14; \$5425.75 of 6 per cent. 5-30-year Jackson county refunding bonds; \$1200 of 5 per cent. 10-20-year bonds of Rusk county common school district No. 40; \$5000 of 5 per cent. 10-40-year bonds of Spur independent school district; \$1500 of 6 per cent. 5-30-year Jackson county road and bridge refunding bonds; \$1000 of 5 per cent. 5-10-year bonds of Limestone county common school district; \$10,000 of 5 per cent. 40-year bonds of Normangee independent school district; \$2500 of 5 per cent. 20-40-year Freestone county common school district; \$15,000 of 5 per cent. 40-year bonds of Angleton independent school district; \$14,000 of 5 per cent. 10-40-year bonds of Frio county common school district; \$17,500 of 5 per cent. 10-40-year bonds of Mineola independent school district; \$10,000 of 5 per cent. 20-40-year bonds of Longview independent school district.

Tex., Austin.—The State Board of Education has purchased the following securities: Nacogdoches Common School District No. 21, schoolhouse bonds, \$800; Harris C. S. D. No. 23, schoolhouse, \$10,000; Denton C. S. D. No. 3, schoolhouse, \$1000; Denton C. S. D. No. 33, schoolhouse, \$1000; Grimes C. S. D. No. 17, schoolhouse, \$1500; Grimes C. S. D. No. 17, schoolhouse, \$2500; Blue Ridge independent, schoolhouse, \$6500; Wichita Falls independent, schoolhouse, \$50,000; Milam C. S. D. No. 4, \$3000; Nacogdoches C. S. D. No. 16, \$1500; Angellina C. S. D. No. 16, \$800; Angellina C. S. D. No. 41, \$5500; Rusk C. S. D. No. 4, \$900; Rusk C. S. D. No. 40, \$1200; Rusk C. S. D. No. 47, \$800; Rusk C. S. D. No. 63, \$400; Normangee independent, \$10,000; Robertson C. S. D. No. 11, \$1000; Robertson C. S. D. No. 21, \$1500; Frio C. S. D. No. 13, \$7000; Longview independent, \$10,000; Edna independent, \$8000; Sour Lake independent, \$5000; Matagorda C. S. D. No. 2, \$2000; Matagorda C. S. D. No. 14, \$5000; Angleton independent, \$15,000; Mineola independent, \$17,500; Mills C. S. D. No. 42, \$1500; Willow Groves independent, \$8000; Halley independent, \$5000; Starr independent, \$6000; Goldthwaite independent, \$15,000; Bandera C. S. D. No. 1, \$8000; Spur independent, \$5000; Limestone C. S. D. No. 1, \$4000; city of Canadian water-works, \$27,000; penitentiary, \$50,000.

Tex., Barry.—The \$75,000 of Barry precinct, Navarro county, road bonds voted June 28 are 5 per cents. It is expected that the bonds will be offered as soon as approved by Attorney-General, probably about October. Address A. M. Varnell, chairman of the commissioners.

Tex., Belton.—\$65,000 of 5 per cent. 40-year water-works and street improvement bonds voted July 2 have been approved. Denomination \$500. Address N. Bassil, Mayor.

Tex., Clifton.—The \$25,000 of Clifton independent school district bonds voted June 24 are 10-40-year 5 per cents.

Tex., Commerce.—July 19 an election is to be held to vote on \$10,000 of water-works bonds.

Tex., Conroe.—Voted: \$250,000 of road district No. 2, Montgomery county, road bonds.

Tex., DeLeon.—The State Board of Education has purchased at par with accumulated interest \$9000 of 5 per cent. city hall bonds; denomination \$500. Address City Council. J. B. Wilson is Mayor.

Tex., Farwell.—Farmer county will soon vote on \$50,000 of courthouse bonds.

Tex., Fort Worth.—The City Commissioners have authorized the issuing of \$400,000 of 5 per cent. 30-year school bonds voted last April. Address City Commissioners.

Tex., Jayton.—The \$12,000 of independent school district bonds voted July 1 are 10-40-year 5 per cents. Denomination \$1000. Address J. O. Robinson. Date for opening bids not yet decided.

Tex., Laredo.—Voted: \$31,000 of 30-year city hall bonds.

Tex., Marlin.—The First National Bank of Marlin has purchased \$25,000 of 5 per cent. 10-40-year water-works bonds.

Tex., Matagorda.—Voted: \$10,000 Matagorda independent school district bonds.

Tex., Poteet.—The \$20,000 of independent school district bonds voted June 28 are 40-year 5 per cents. Denomination \$500. J. L. Vining is president School Board.

Tex., Rockport.—A petition is being circulated calling for an election to vote on \$155,000 of road and causeway bonds.

Tex., Spur.—Bids were opened on July 15 for \$23,000 of 5 per cent. 10-40-year water-works bonds. Denomination \$1000; dated June 1, 1913. Oscar Jackson is City Secretary.

Tex., Tyler.—Voted: \$300,000 of road bonds.

Tex., Tyler.—All bids received July 10 for \$75,000 of 5 per cent. 10-40-year road district No. 1, Smith county, bonds were rejected.

Tex., Vernon.—The election to vote on \$16,000 of independent school district bonds will be held July 15.

Tex., Waxahatchie.—Voted: \$35,000 of water-works, street and school building bonds.

Tex., Weatherford.—Voted: \$4000 of sewer extension bonds.

Va., Castletown.—Voted: \$150,000 Castlewood district, Russell county, road bonds.

Va., Highland Park, P. O. Richmond.—John M. Lewis, superintendent, is now offering at par at private sales \$50,000 of 5 per cent. 30-year general improvement bonds voted May 15, 1913; dated June, 1913. It is stated that a Petersburg concern has purchased \$15,000 of the issue.

Va., Luray.—Voted: \$40,000 of Front Royal district and \$20,000 of South River district, Page county, road bonds.

Va., Norfolk.—The City Council has authorized the issuing of \$30,000 of Park Pl. school annex bonds.

Va., Wytheville.—Voted: \$5000 of 6 per cent. 2-6-year reservoir improvement bonds.

W. Va., Barboursville.—Voted: \$125,000 of

water-works bonds. It is stated that bids are to be asked immediately.

W. Va., Huntington.—The sale of \$190,000 of 5 per cent. 30-year street and sewer bonds, offered July 7, is postponed owing to taxpayers of the city having secured a temporary injunction restraining the sale.

W. Va., Keyser.—Voted: \$35,000 of Mineral county school building bonds.

W. Va., Parkersburg.—All bids received for the \$300,000 of independent school district school bonds were rejected. I. B. Bush is superintendent of public schools.

W. Va., Ronceverte.—Mayer, Deppe & Walter, Cincinnati, have purchased at \$5080.50 the \$5000 of 6 per cent. 30-year street bonds; denomination \$500; dated May 5, 1913; maturity July 5, 1943. J. Geo. Reynolds is City Clerk.

W. Va., Warwood.—The City Council has authorized the issuing of \$2000 of street-improvement bonds.

W. Va., Welch.—Bids will be received until 6 P. M. July 28 for \$80,000 of 6 per cent. 10-year street improvement bonds.

FINANCIAL NOTES.

The California State Bank of California, Mo., has increased its capital from \$30,000 to \$50,000.

The People's Bank of Salisbury, Mo., has absorbed the Farmers & Merchants' National Bank of Salisbury.

Miss., Macon.—City of Macon, Miss., wants to buy about \$12,000 of its light and water-works bonds. J. J. Scott is City Clerk.

City of Macon, Miss., wants to buy about \$13,000 of its light and water-works bonds. J. J. Scott is City Clerk. Further particulars will be found in the advertising columns.

Reports from Winchester, Ky., state that the People's State Bank of that place proposes to change its name to the People's State Bank & Trust Co., adding a trust feature.

According to data compiled by Comptroller Lane, counties in Texas have issued since 1909 for road and bridge purposes \$12,465,944 of bonds.

Bonds of McCracken county, Kentucky, Nos. 151 to 390, inclusive, of the issue of March 1, 1893, have been called for payment by order of the Fiscal Court of McCracken County. Jas. C. Utterback is county treasurer.

The Old Dominion Trust Co. of Richmond, Va., is doing business in its permanent home at the corner of 9th and Main Sts. The bank was chartered last January with 1,000,000 capital. W. M. Habbist is president.

The stockholders of the Southern National Life Insurance Co. have ratified the proposed consolidation of the company with the Inter-Southern Life Insurance Co., executive offices, Louisville, Ky. The capital of the latter company after the merger will be \$750,000. James R. Duffin is president.

At the annual meeting of the North Carolina Bankers' Association, held at Asheville, N. C., July 8-10, the following officers were elected for the ensuing year: President, George A. Holderness of Tarboro; first vice-president, Thomas E. Cooper of Wilmington; second vice-president, J. L. Armfield of Thomasville; third vice-president, W. S. Blakeney, Monroe; secretary and treasurer, W. A. Hunt of Henderson; executive committee, E. C. Rea of Edenton, T. A. Uzzle of Newbern, W. B. Drake, Jr., of Raleigh, A. L. Davis of Burlington, I. F. Craven of Ramseur and E. O. Anderson of Charlotte.

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1000 tons New Structural Steel Plates, Angles, Beams, Channels, Bars.

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1 30 tons capacity, 53' 0" span.
1 7 1/2 tons capacity, 29' 8" span.
1 5-ton Open-Air Gantry, 110' span.
1 15 tons capacity, 36' 6 1/2" span.

TOOLS

Large 14' 0" Vertical Boring Mill; can be extended to 24' 0".
2 Large Ingersoll Milling Machines, capacity between uprights 87"x34" and 44"x40".
1 Double-end L. & A. Punch, Shear and Framing Machine, capacity to 24" "I" beams.
Coping Press, capacity 15" "I"s and smaller.
Punches, Single-end—
2 capacity 7 1/2"x3 1/2" with 21" throat.
1 capacity 1"x1" with 21" throat.
1 capacity 1"x1" with 24" throat.
Shears, capacity to shear 1 1/2" plate.
Rotary Planer or Face Milling Machine, 42" head.
Chain Blocks, 2 to 5-ton capacity.
1 Yale & Towne Triples, 30-ton capacity.

LOCOMOTIVES

1 Porter 12"x18" Standard Gauge Switch Engine, saddle-tank.
About 2 miles Track, 60-70-lb. Rail.
1 Derrick Car, steel boom 16' long, standard gauge.
Ames High-speed Hor. Engine, about 100 H.P.
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